

THE ARCHITECT & BUILDING NEWS

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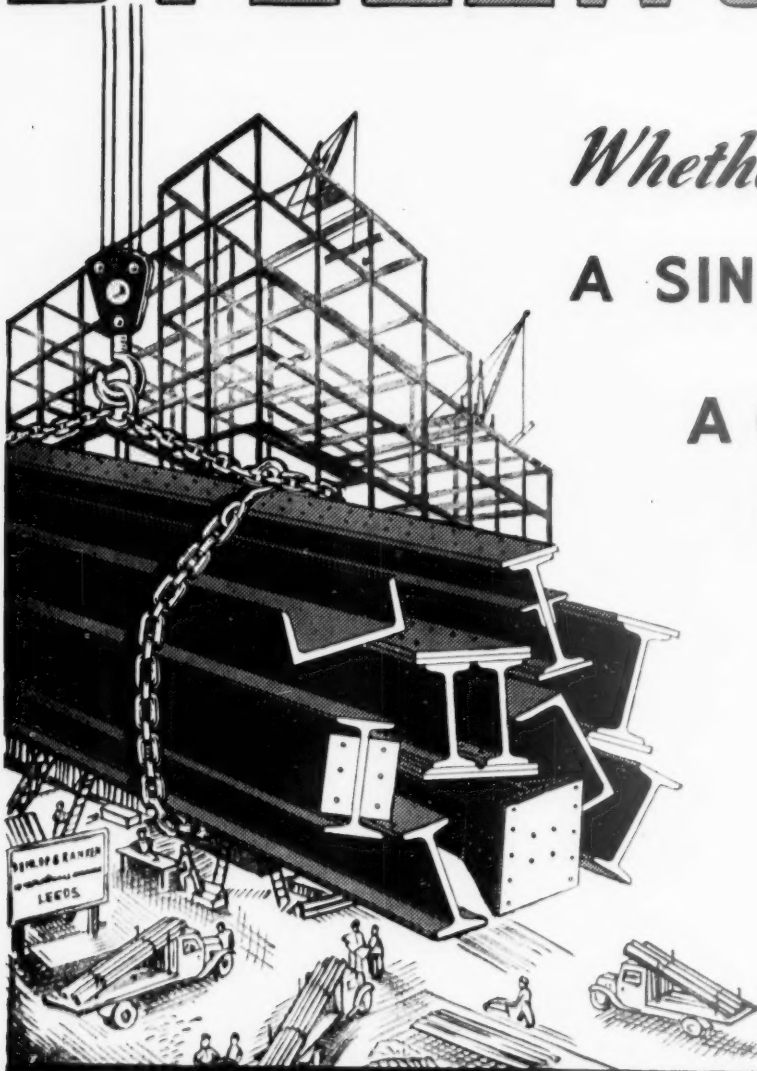
APRIL 9, 1953

VOL. 203

NO. 15

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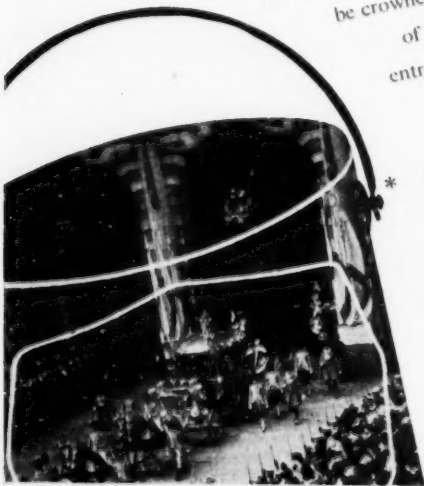
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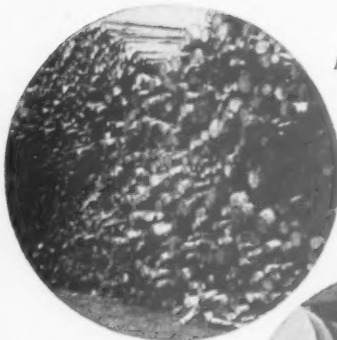
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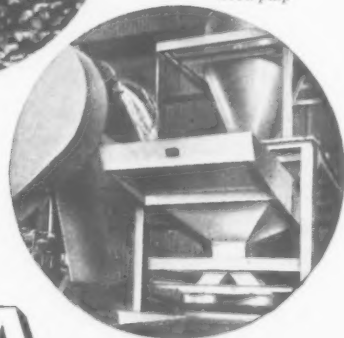
Log pile



*Converting logs
into chips*



*Grading chips prior
to conversion into
wood pulp*



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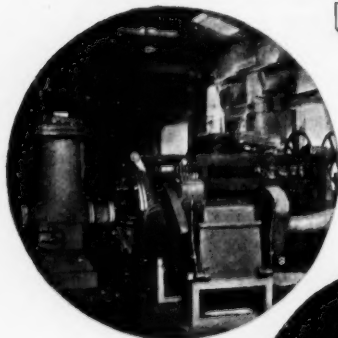
SUNDEALA

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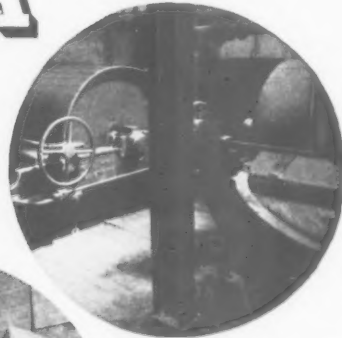
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*Converting wood
chips to wood pulp*



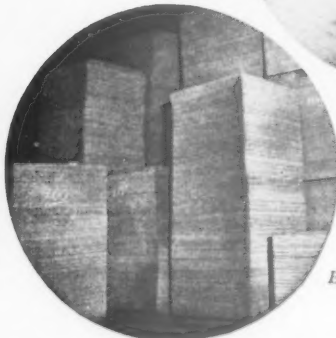
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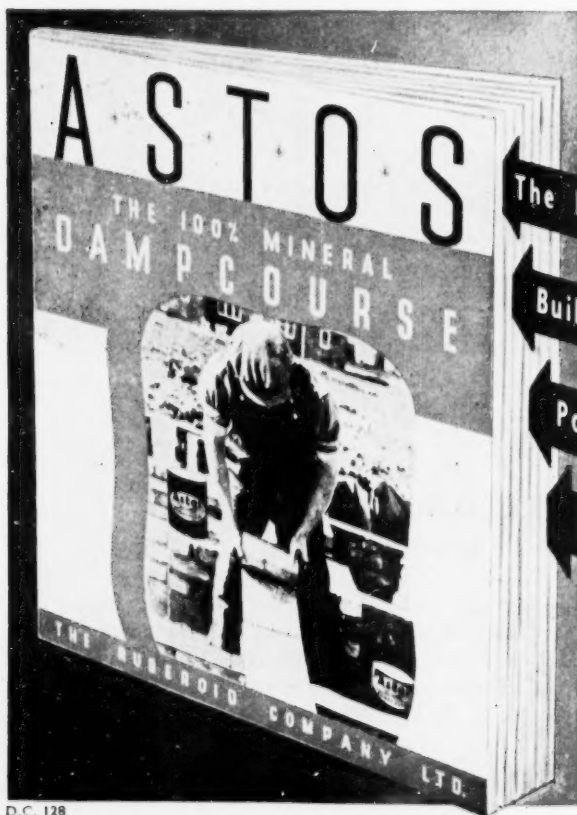
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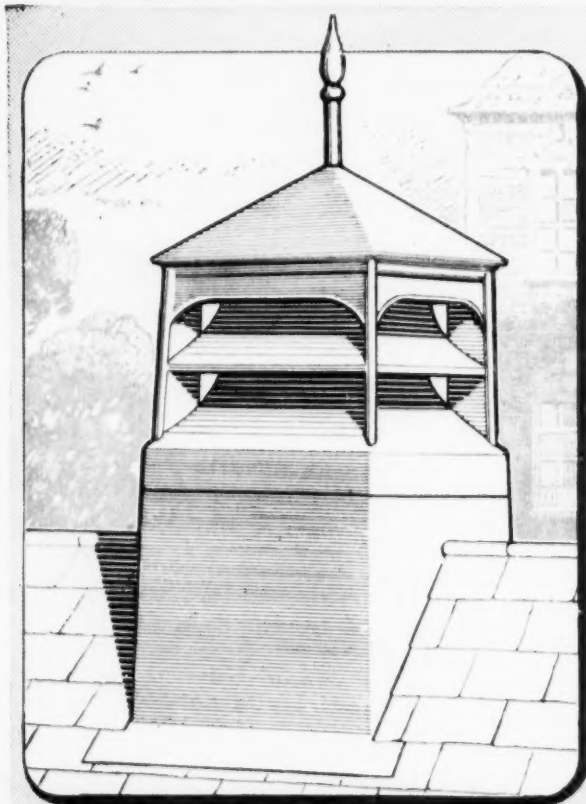
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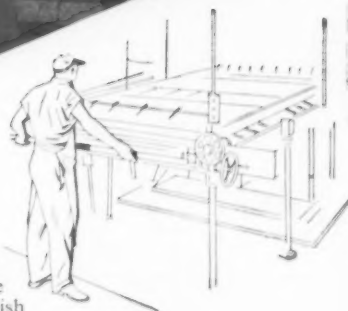
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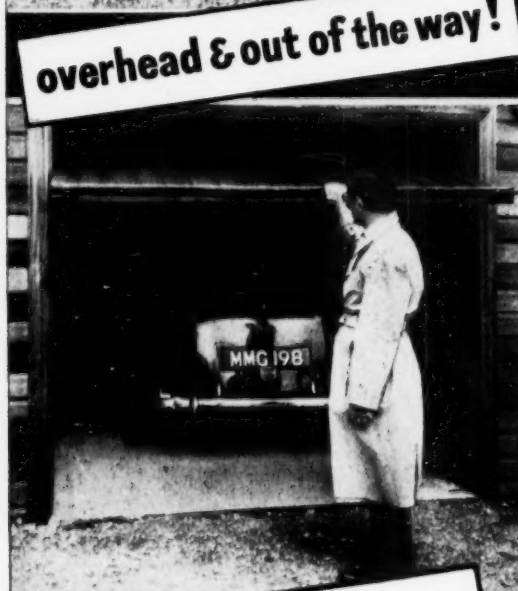
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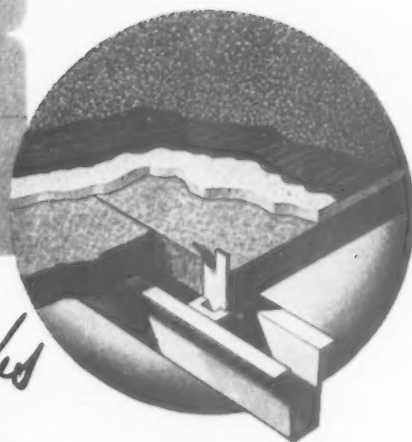
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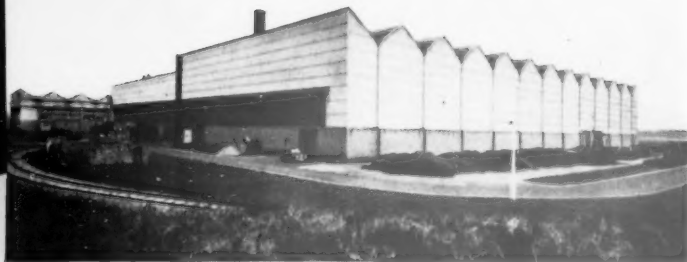
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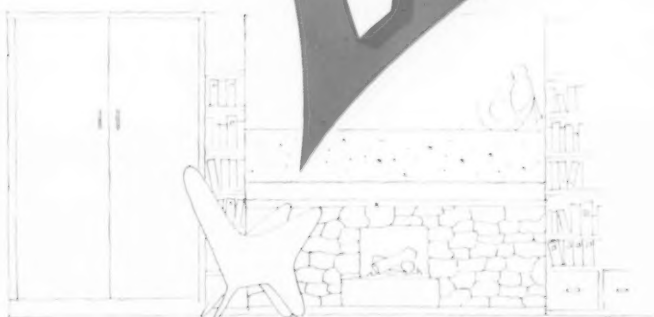
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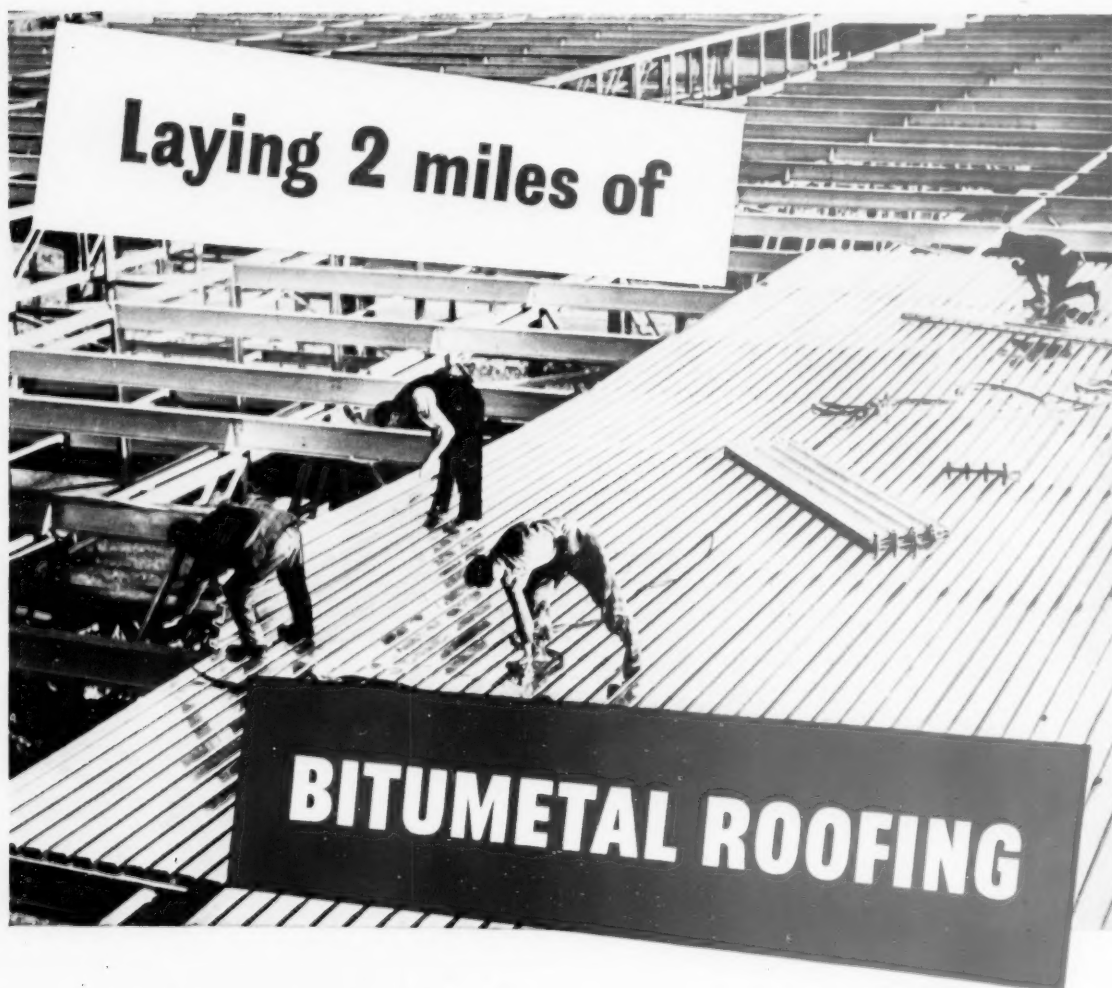
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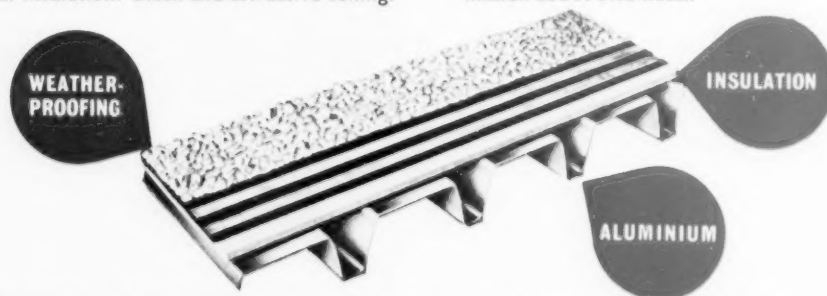


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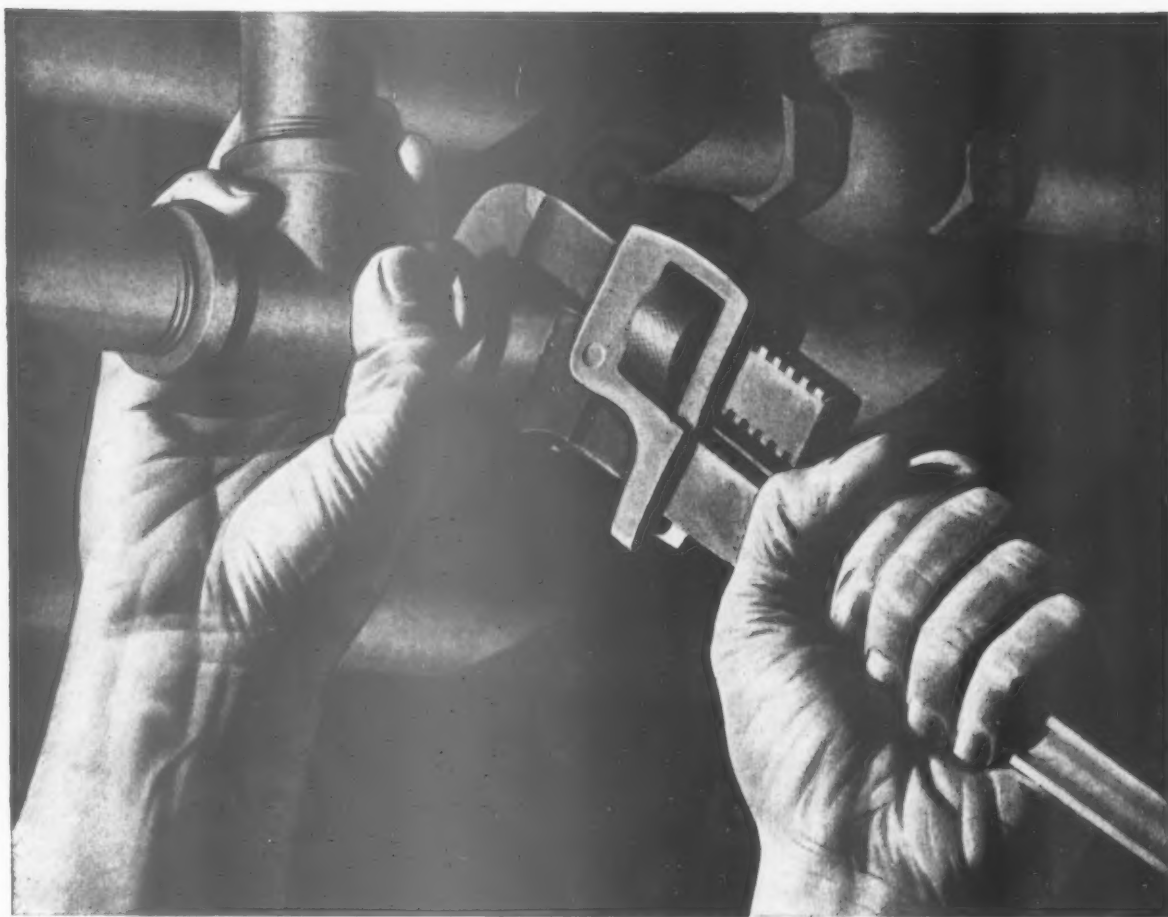
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15



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BY JOHN MINTON

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INDUSTRIAL PLANNING AND SAFETY

PARLIAMENT has been presented this week with the Annual Report, for 1951, of the Chief Inspector of Factories*. It is a weighty document amply packed with data and information, not only of the year's work, failings and progress, but with a review of the last fifty years; for it was in 1901 that the great consolidating Factory and Workshop Act was passed. Since then there has only been one major legal revision and that was again concerned with consolidation, the Factories Act of 1937. Regulations and Welfare Orders under the acts have grown with rapid pace and it cannot be long hence that further review and consolidation will be to the advantage of both industry and inspectorate.

In the "jubilee" review the Report notes that many shifts of industrial location have taken place. Of the great ironworks of Merthyr and Dowlais, for example, nothing but slag heaps and rubbish remain. Road transport has been the greatest factor in revolutionizing the new distribution and siting of new factories and the opening up of new areas of the country for industrial use.

An industry that leaves nothing but rubbish behind when it moves, for whatever reason the shift takes place, should come within a wider review than that of the Factory Inspectorate; by its action it becomes a destroyer of national amenity and welfare and should be arraigned for its faults in Parliament and by the Government. The wastes of industry should be included in subsidy considerations. The Report of the Barlow Committee was published a long time ago, but its emphasis on national planning of industry is not yet sufficiently attended to and is not yet out of date.

In the section of the Inspector's Report devoted to the statistics of accidents, we note that between the years 1939 and 1951 the largest increase which has oc-

curred is in connection with transport. It is an increase summarized by the staggering figure of 250 per cent. This can be an indication of two things; first, the huge increase in the use of the roads for industrial purposes within the last twelve or fifteen years. Secondly, the inadequacy of the road system of this country to deal with the increase. The Chief Inspector calls for an enforcement of stricter discipline among drivers and users of vehicles. This is, of course, a necessary and obvious procedure, but it is a negative and restrictive way of dealing with a much wider problem than mere accidents. While the efficiency, size and ubiquity of road transport vehicles continues to increase, the planning of the roads remains, except for piece-meal diversions and widenings, much as it was when the tolls were abolished. Only increased strengths of beds and the betterment of surfacing has been universal and these very improvements have tended to increase the risks and accidents on otherwise unsuitable roads. Unless drastic action is taken on a national basis to improve the road system, industry will, in the future, find itself hamstrung by the roads; expansion will not lie in the use of present facilities much longer.

The Report makes one comment which is somewhat surprising and which may even be questioned in some quarters. It says that disappointment has been expressed with the general layout and amenities of some of the standard type of factories in the New Towns and on some industrial trading estates. In this connection the late date of the Report, "for the year 1951," should be remembered; we wonder whether the Inspectorate has changed its mind at all since then.

In the field of building there are some points to which attention can be paid with profit. In the first place there seems to have been marked decreases in the number of all accidents on building works during the year 1950-51, though fatal accidents show

* Annual Report of the Chief Inspector of Factories for 1951 (Cmd. 8772) H.M.S.O., 6s. 6d. net.

an increase. The Report states that there is plenty of scope in the industry for education in safety, "a task to which the industry should direct its attention." Inspectors appear to have made strenuous efforts to stress the Building (Safety, Health and Welfare) Regulations of 1948, but the amount of progress made during the year in complying with the code was "frankly disappointing."

One particular risk to which attention is drawn is the increasing popularity for light-weight devices for raising loads to working platforms; while the apparatus may be well-designed and efficient for its purpose, the main risks arise from the tendency to over-load the working platforms and scaffolding. In this matter, however, the makers of equipment

appear to be co-operating usefully.

While there is a lot in the Report about welfare facilities in permanent industrial premises, less is said about similar, though temporary, arrangements on building sites. The importance of this side of organization for the increase of efficiency and output cannot be stressed too greatly; it should receive more attention generally.

The Report, even though its publication points the long time-lag between the operative year, 1951, and today, should be in the hands of all who manage industry or plan its extension; the latter include, most certainly, architects who design factories and builders who build them.

EVENTS AND COMMENTS

LE CORBUSIER'S LAWSUIT

Although it is well known that the lawsuit brought against M. Le Corbusier by the Society for General Aesthetics of France failed, reports in the national press have been short and lacking in detail. It now appears from an article in *Town and Country Planning* for April that the case failed on points of law rather than on fundamentals. The complaint was that the architect had constructed the building without the necessary building permit from the Ministry of Reconstruction and Planning. As soon as the action was started the Ministry, which was surely the client, realized that it had made a mistake and issued the necessary permit. The Society countered by pointing out that the signatures of the Ministries of Public Health and of the Interior were also required. The tribunal hearing the case decided that decrees made after the event were invalid. The Society also claimed that the building contravened the building byelaws. The findings of the Tribunal were: that the Society was out of order in bringing the case, as it was not itself an injured party; that the Government was the only body which could insist on obedience to the regulations about building permits; and that Le Corbusier could not be condemned for reasons of aesthetics "which were at least as vague as they were variable." It is not clear whether the quoted passage was part of the findings or something contributed by the author of the article, M. Pilliet, a noted anti-Corb fan.

There seems to be no doubt that the building was constructed without the necessary permission and that it contravenes the building byelaws, but since the whole scheme was sponsored by the Government it is reasonable to assume that the competent authorities knew very well what was going on. It is perhaps a pity that special rules or waivers were not drawn up beforehand, but perhaps that would have been too logical for the most logical of races.

Owing to the Easter holidays, accounts of the various functions held in honour of this year's Royal Gold Medallist will not appear until next week.

FOIRE DE PARIS, ETC.

If you like exhibitions I can recommend the Foire de Paris which will be held this year from May 9 to 25. It is a mixture of the B.I.F. and the Ideal Home Exhibition,

with some international contributions thrown in. I do not know whether there is to be a British pavilion this year. When I last went some years ago there was, as far as I can remember, nothing official.

The Foire is enormous, partly inside and partly out, the musical accompaniment which emanates from loudspeakers on a high tower is almost deafening, salesmen bellow at you from all sides; the food and drink samples are delicious. The centrepiece was a huge tower crane from which were suspended five small motor cars.

The Government of France may not be very stable but it thinks up some splendid ideas—and usually puts them into practice. The latest is for an international City of Arts to be constructed in the centre of the city—I wonder where? Perhaps on the site scorned by Unesco, behind the Ecole Militaire. Ateliers and lodgings for students of all nationalities will be provided. Let us hope that the British nation will here show up a little better than it does in the Cité Universitaire, where there is no British pavilion although there was once the foundation stone of one. See this page, March 12.

If you decide to see the Foire de Paris you might also like to see an exhibition of French Homes to be held at the Palais de Chaillot until September 27.

THE BOAT RACE

It really is quite extraordinary how London divides itself into Oxford and Cambridge on boat-race day. Considering the very fleeting glimpse available for the river-bank watcher it is odd that so many thousands go to look and to cheer. Of course, in these days there is more to see than 16 men tearing their hearts out; there is a bishop standing serenely in the bows of the umpire's launch—he is, it is true, disguised as a rowing man—there are the rain-coated television camera operators crouched behind their cameras and the familiar voices of the B.B.C. commentators, in the flesh and rowing caps, sitting among a small forest of masts in another launch which, after all, might provide another thrill by breaking down again. Besides this bevy of box office appeal there is a fleet of boats, making a tremendous wash, and holding the officially less important whose hearts are in one or other of the competing boats. I saw the race from a fine vantage point, thanks to the kind hospitality of Messrs. Rosser and Russel, the heating engineers, whose

works adjoin Hammersmith Bridge. Some 400 guests, among whom were many architects, thoroughly enjoyed the spectacle from the roof and were then glad to warm themselves at the excellently appointed buffet in the sheet metal shop, which had been cleared for the occasion. When I marvelled at the organization of the party a director admitted that now and again a machine or two got lost in the process.

ARCHITECTS OFF THE DRAWING BOARD

I believe I am right in saying that there is no practising architect in Parliament, indeed it is difficult to see how there could be. All the same it is a pity that there are not several. It is also a pity that more architects do not interest themselves in local government, if they did, it is said, it would be much better for the country. No doubt there are a number on local councils but generally speaking architecture seems to be a whole-time job, although some members of the profession take to making things with their hands and others take up military service in their spare time. Far too many architects do nothing, think nothing and talk nothing but architecture. However, I hear that Mr. Eric Spencer, a partner in the firm of Wales and Spencer, architects and surveyors, is to stand as an Independent for the Skipton Urban Council, and Mr. James Roberts, A.R.I.B.A., aged 30, and in private practice, is to stand as a Conservative at the Birmingham City Council elections. Good luck sirs.

Mr. A. W. Glover, A.R.I.B.A., of Dewsbury, suggested at an "Any Questions" party that the town's contribution to the Coronation should take the form of voluntary labour by all the men in the town. They should assemble, he thought, on Coronation Day and march off with flags flying



Prefabricated igloo shown at the 36th International Car Show at Frankfurt. It can be taken to pieces for transport on the roof of a car.

and bands playing and spades fixed to do some really worthwhile jobs for the town.

BRITISH INDUSTRIAL DESIGN IN ZURICH

The C.O.I.D. announces that the British Council is to put on an exhibition of Industrial Design at the Kunstgewerbemuseum at Zurich for three months starting on June 18. The main selection of exhibits will be made from the C.O.I.D.'s Design Review. Manufacturers who have products which have not yet been accepted by the C.O.I.D. and who wish to have them considered should send photographs or flat samples to "Design Review," Tilbury House, Petty France, London, S.W.1. The selection of exhibits for Zurich will be made by an independent Selection Committee and manufacturers of products chosen will be asked to deposit £10 for the first and £5 for each other entry in the catalogue. Further information on "Design Review" can be obtained from the address given above. Information on the exhibition can be obtained from Wyndham Goodden, O.B.E., The British Council, 2-6, Bainbridge Street, New Oxford Street, W.C.1.

—AND IN THE U.S.A.

The Smithsonian Institute in conjunction with the C.O.I.D., who chose the exhibits, is holding an exhibition of British Industrial Design at the Institute of Contemporary Arts, Washington, until April 22. It will then tour several U.S. cities. The selection was made from "Design Review," the products being shown are mainly items of domestic furniture, fittings and furnishings and Coronation souvenirs.

THE DANGERS OF COMPRESSED AIR

I suppose that most people have heard versions of the horrible accident that happened as a result of skylarking with a high-pressure air-line, when a man died from multiple internal injuries as a result of air being forced into him. This story should be enough to warn the stupidest person and the Royal Society for the Prevention of Accidents is to be congratulated on producing a leaflet on the subject which by giving details of what happened and of the injuries sustained by the unfortunate man cannot fail to make an impression on all those who use compressed air. The less obvious dangers of using a compressed air jet are also dealt with in the leaflet. These include the quite common practice of people dusting themselves down after work and the blowing of dust and swarf from machines or floor. If compressed air enters a puncture in the skin it can, even at quite low pressures, cause swelling and severe pain. If it enters the bloodstream it can cause death. We all use compressed air sometimes, either on the site, on our cars, or in the studio, and it is important that those who are inclined to practical joking should be warned that "Compressed air can be dangerous." The leaflet can be obtained from the Royal Society for the Prevention of Accidents, 52, Grosvenor Gardens, S.W.1.

THIS TIME IT'S TERMITES

You will remember our anonymous poet two weeks ago. This appeared in a recent issue of the *New Yorker*.

Some primal termite knocked on wood
And tasted it and found it good,
And that is why your Uncle Dwight
Fell through the bedroom floor last night.

ABNER

PRESENTATION OF THE ROYAL GOLD MEDAL TO CHARLES-EDOUARD JEANNERET

On Tuesday, March 31, the President of the Royal Institute invested Le Corbusier with the Royal Gold Medal for 1953. A tremendous gathering greeted M. Le Corbusier with prolonged applause. Eulogies were read by M. Claude Lebel, representing the French Ambassador; Sir Herbert Read, Mr. Robert H. Matthew, Mr. W. Wells-Coates, and Mr. Colin Glennie.

MONSIEUR LE CORBUSIER, who spoke in French, said: "I have listened with interest to the speeches which have been made, and I am conscious of the kindness shown to me in doing me this great honour. I wish to admit, what I think that you have recognized, that it is always the human being, man, that I have sought to study, not as a professional architect but as a discoverer, and also as a traditionalist. I have always had my feet in the past, and my head in the past too. My roots are in the past, though not in the Dark Ages of the academies. At the same time, I have tried to take a step towards the future. It has been my object always to be simple and direct, to be both an engineer and a poet.

"After all these flowers which have been showered on me, I should like to try to show you another aspect of Le Corbusier, Le Corbusier as a *cheval de fiacre*. If tonight I am wearing this magnificent medal, it is because I was a *cheval de fiacre* for more than forty years. During all that time I worked for all the days that God made, and often in the evenings as well, with one aim in view, to follow the truth and let my conscience be the judge of whether my work was good.

"Before you presented me with all these bouquets I received, like a true *cheval de fiacre*, many blows with a whip, but this did not alter my outlook or change my aims. I should like to tell you something about what happened to me, because it will perhaps show you at what a price one can perhaps succeed in making something of one's life. In all my life of more than sixty years I have really only had one client, and that was for the Unite d'Habitation at Marseilles. I was asked 'Will you make a great building for these people?' and I replied, 'Yes, on one condition, that I am not to be bound by any rules.' They agreed, and so I started work on this building, which embodies a great many of my proposals for the modern town, the town of to-day. I was governed by the cosmic laws of space, by my respect and admiration for nature, by the needs of the family and the recognition of the home as the fundamental unit of society and the hearth as the centre of the home. My work there has its roots in the past, in the Grande Chartreuse, which for fifty years has appealed to me by its harmony and its perfect association of the individual and the collective.

"That is the positive part of what I have done. I have created something at Marseilles, as I realized when on October 14 last, at 9 o'clock in the morning, I saw it completed and inhabited. There was general agreement that it was magnificent, and I was the first to say so. I always had confidence that it would prove to be so, in spite of all the attacks that were made upon it, and on October 14 of last year I realized that here was a new achievement not of an architect but of the constructive spirit of our time.

"Now let me tell you something which will show you that I am, after all, modest. I began in 1923, when I built a village at Pessac. For eight years this village remained uninhabited, because for eight years it was refused a water-supply, until in the end the Government had to intervene. In 1925 I built the pavilion 'L'Esprit Nouveau' at the Exhibition of Decorative Arts in Paris. It was the most hidden-away building in the whole exhibition, and came upon you, as you went round the exhibition, as a sudden apparition, as something wholly unexpected. The international jury wanted to give me a diploma of honour, but one of the best architects in France, himself a medallist, protested; he said, 'Whatever it may be, it is not architecture.' The battle, you see, was already joined.

"Then there was the competition for the new League of Nations building in Geneva. Twelve kilometres of plans

were submitted, and I sent in about a hundred metres. That was not accepted, for reasons which I thought were little short of abominable. That was followed by plans for the Centrosoyus building in Moscow, which were first of all accepted, but then they wanted a balcony on the façade, and in the end my proposals were dropped. I was asked to prepare plans for the Palace of the Soviets, and these were first of all accepted and then declined.

"In 1935 I decided to go to America for a change of atmosphere, and there I found—you may not believe it, but it is true—Americans who were suffering at that time from an inferiority complex. A model of my design for the Palace of the Soviets was exhibited—of all places!—at the Rockefeller Foundation in New York, where it aroused the admiration of young Americans. That model, two metres long, is in the museum of the Rockefeller Foundation. Another project on which I worked at that time was refused on the dual plea that it was revolutionary and out of date.

"With some Brazilian architect friends I worked on plans for a Ministry building in Rio de Janeiro. That building was actually put up during the war. I found out that it had been through seeing an illustration of it in an English magazine, and I recognized it at once as our palace, put up six or seven years after we designed it.

"Then came the reconstruction of France after the occupation. Everybody seemed to be working on this, and the Minister who was responsible said to me, 'What are you reconstructing?' I replied, 'Nothing, Mr. Minister.' He said, 'Well, you built a town once. Why not reconstruct that?' He made inquiries from his staff, and they told him that all the work had been allotted to somebody or other, so he said, 'Well, there is always La Rochelle. It is not destroyed at present, because the Germans are still there, but the Allied Armies are closing in, and in a fortnight it will be destroyed, and then you can rebuild it.' Happily, however, it was not destroyed, and so I did not have to rebuild it.

"I ought also to mention the town plan for Algiers. Over a period of years I made a number of plans without any fee for a new town, and people said, 'If it could come true it would be marvellous,' but it did not come true. Algiers was the last of such plans. I made a plan for Barcelona which was accepted by everybody, but then the revolution came. I made a plan for Stockholm, but they said that they recognized the hand of the author, and it was put on one side. There was a plan for the left bank of Antwerp in 1933. In 1938 I did a plan for Buenos Aires, but seven years later one of the Ministers said, 'If we bring in Corbusier, it will seem to show that we can't do it ourselves.' A plan for Bogota was accepted, but then there was a political revolution.

"All that represents the work of a *cheval de fiacre*. It meant a vast amount of work by head and hand and collaboration with large numbers of people. My plan for La Rochelle, which was a good plan, was silently put aside; I was not called on to do anything, and the town was reconstructed on other lines. At St-Die, which I was asked to rebuild, people said, 'Are you going to make us live in huge barracks?' and everybody, from the bourgeoisie to the workers, rejected the idea. That shows you a little of the nature of the work which I have accomplished during my career.

"I should like to say once again how much I appreciate this Medal which I have received from Her Majesty the Queen, and I thank you once more."

American News Letter—6

ON March 17 students, faculty and guests filled the Hunt Hall of the School of Design at Harvard to overflowing to hear José Luis Sert, newly appointed Dean of the school, deliver a lecture entitled "The Scope of the Architect."

Walter Gropius was a member of the audience but Mr. Sert appeared to be unconscious of the historic occasion and gave a fast-moving and disarming account of the mistakes and excitements of modern architecture since the '20s. He dwelt apologetically on the mistakes.

The principles of the '20s, he said, had now received acceptance in the schools. There were still a few that maintained the Beaux Arts system of teaching, even in the United States, but on the whole we could say that the Battle for the Schools had been won.

The first phase was over.

Now it must be realized that the new architecture was not the work of a few men but of a few generations. It was discouraging to hear that the battle of modern architecture was already won—the public had accepted "just a few gadgets." A line of distinction should be drawn between the architecture of fashionable clichés and a more profound type that was still in the making and it should not be assumed that functionalism did not include the superfluous—the superfluous was necessary.

It was a terrible thing, said Mr. Sert, to see the idea of the home replaced by sensationalism and clichés. A house was a place for quiet and peace, but the question of humanization did not depend on the materials used—this was a mistake of the '30s. It was the whole *spirit* of a building that was, or was not, human, not the kind of materials used.

The architect, not the sociologist, the economist or the programme planner was most able to interpret this "spirit" in terms of building—he was drawn from the ranks of men because of his ability to "see with his eyes," a quality which alone separated a definite group from the rest of mankind—but this made his dependence on the

others even more significant and a wide field of expansion opened out of this relationship. There were three big fields offered to the organized teams which would form the profession of the future:

the researcher,
the builder,
the planner.

Enquiry should be made into everything that was new—an activity for which some people were especially gifted.

Others were particularly able and interested in the process of building itself and these should work with teams of builders. On the site an architect was usually in the way of the builder, probably there to "supervise" something that had not been shown sufficiently clearly on the drawings. This could all be different.

Finally Mr. Sert thought that physical planning had not been developed enough in any school of architecture. From the time that he presented a scheme at school to the time when he had to deal with a client the architect tried to "spotlight" his proposed building, fading out surrounding property, trees and traffic. This did not encourage a feeling for physical planning.

In the slides which followed his talk Mr. Sert dwelt particularly on this point. A city or neighbourhood plan inevitably began life as something rather abstract, a necessary hypothesis to enable costs, population density and other factors to be discussed. As it progressed it became concrete and the process represented the coming to life of the plan through the combined action of researcher, builder, planner.

In conclusion, Mr. Sert referred to the sobering fact of the difficult times in which we were living. How could all these ideas be developed?

"They are exciting, *thrilling* times," he said, with emphatic Spanish accent on the adjective.

"I am an optimist; things are going to be better."

GEOFFREY HOLROYD

N E W S O F T H E W E E K

Design and Industries Association Poll Result

The outcome of the D.I.A. Exhibition at Charing Cross Station (London Transport) where over 30,000 visitors from February 25 to March 21 balloted between two identical rooms furnished at the same cost—one in contemporary style and one in the modern manner that the trade has found to be the most profitable—is that three Londoners in five prefer contemporary furnishings and decoration.

Men favoured the "contemporary" room almost as much as women; in fact the difference between the sexes was negligible. Nor was there as wide a gulf between young and old as had been expected. While 63 per cent of the under 35's chose the contemporary room, it was also to the taste of more

than half of the over 35's (53 per cent). Strongest enthusiasts were the younger women, two in three of whom made it clear that furnishings of good contemporary design are their choice.

A test sample shows that the contemporary room won a smaller proportion of the votes of those who had bought £10 or more of furniture in 1952 than of those who had not (55 per cent against 65 per cent); but even these customers gave the room a straight majority.

The results greatly exceed expectations. Though the D.I.A. has realized for some time that the demand for furnishings in the contemporary manner is much greater than the proportion of space they obtain in most retail displays, it hardly expected an outright victory for its point of view.

The next task is to test the reactions of provincial cities, whose taste is said

to differ widely from that of cosmopolitan London. The exhibition will be reproduced and a vote taken at Lewis's, Ltd., Market Street, Manchester, probably in May. It is hoped that discussions with retail stores in other cities may lead to further showings. Meanwhile any English, Welsh or Scottish body interested in staging a similar exhibition is invited to get in touch with the Secretary of the D.I.A., 13, Suffolk Street, S.W.1, Tel.: WHIttehall 0540.

The Use of Colour in Schools

The use of colour in schools is the subject of Building Bulletin 9 "Colour in School Buildings," just published by the Ministry of Education (H.M. Stationery Office, price 4s nett). The purpose of the Bulletin is twofold; to advocate a methodical use of colour and to present a new range of colours.

Tenders for Buildings in the Greater London Area

The President of the Board of Trade has asked the Monopolies Commission to report on certain practices relating to tenders for the construction of buildings in the Greater London area.

In this reference Section 6(2) of the Monopolies and Restrictive Practices Act has been used for the first time. In the case of previous references a report on public interest, it has been the Commission's duty to report comprehensively on this aspect of the conditions and practices found to prevail in the industry concerned. Under the Section 6(2) procedure, the Commission—once they have established that the conditions prevailing in the industry are such as to bring it within the scope of the Act—are to report on the "public interest" aspect only of the particular practices specified in the reference. These are: (a) communicating to a person other than the person calling for tenders for the construction of a building the amount of any proposed tender for such construction in accordance with any agreement or arrangement so to communicate; (b) adjusting the amount of any proposed tender for the construction of a building in accordance with any agreement or arrangement between the proposed tenderer and any person other than the person calling for tenders for such construction. These include the practices which have been referred to in previous reports as "exclusive dealing" and "collective boycott."

Any person or organization wishing to offer evidence on the subject should write to the Secretary of the Monopolies and Restrictive Practices Commission, 3, Cornwall Terrace, London, N.W.1.

City and Borough Architects Society

At the Annual General Meeting of the City and Borough Architects Society held at the R.I.B.A. on March 20th, 1953, the following officers were re-elected for the Session 1953-54: *President*, Leonard C. Howitt, B.Arch., Dip.T.P., D.P.A., F.R.I.B.A., M.T.P.I.; *Vice-President*, C. C. Shaw, B.Arch., F.R.I.B.A., Borough Architect, Barking; *Hon. Secretary*, Johnson Blackett, F.R.I.B.A., Borough Architect, Newport, Mon.; *Assistant Hon. Secretary*, Maurice H. Forward, F.R.I.B.A., F.R.I.C.S., Borough Architect, Lewisham; *Hon. Treasurer*, George Kenyon, Dip.Arch., A.R.I.B.A., Dip.T.P., A.M.T.P.I., City Architect, Newcastle-upon-Tyne.

Architectural Teachers Conference, 1953

The 5th meeting of the London Group of the Architectural Teachers' Conference will be held on Saturday, April 25, in the Council Chamber of the R.I.B.A.

In the morning Mr. H. A. Ackland, O.B.E., F.R.I.C.S., Chairman of the Quantity Surveyor's Education Subcommittee of the R.I.C.S. will give a paper on "The Architect and Quantity Surveyor as Good Relations." Professor A. E. Richardson, R.A., F.R.I.B.A., will be in the chair. In the afternoon, Mr. D. Woodbine Parish, Past President of the L.M.B.A., will give a paper on "The Architect as a Member of the Building Team."

New Civic Buildings, Doncaster

It was decided at a meeting of Doncaster Corporation Finance and General Purposes Committee on March 30 that there will be no national or open architectural competition to decide on a design for Doncaster's new civic buildings.

This decision followed consideration of a letter from Doncaster Civic Trust suggesting such a competition and deploring that the new £750,000 College of Further Education, the first part of the new civic centre, due to be started this year, would be "a large building of indifferent quality," poorly sited in regard to other schools in the area.

As an alternative to the national competition, which the trust felt would maintain the excellent tradition of municipal building in Doncaster as exemplified by the Mansion House, built in 1745 by James Paine, the letter suggested a co-ordinated architectural procedure through the services of an external adviser.

Alderman P. Judd, the chairman, said that the Borough Architect, Mr. L. J. Tucker, had been instructed to approach the R.I.B.A. on the siting and elevation of the civic centre as a whole, on the understanding that no delay would be caused to building of the new technical college.

Mr. Tucker said afterwards that this would possibly mean that the R.I.B.A. would suggest an architect to give a second opinion on the scheme.

R.I.A.I. and Arts Council Exhibition

An Architectural Exhibition entitled "Focus" under the joint auspices of the Royal Institute of The Architects of Ireland and The Arts Council is to be held at No. 8 Merrion Square, Dublin, from April 20 to May 2 inclusive.

The exhibition is planned to attract a fairly wide public by showing through the medium of photographs, models and perspective drawings, a comprehensive cross-section of architectural achievement in Ireland: past, present and future. The Hon. Secretary is Mr. Norman Peachey.

APPOINTMENT

The Belfast firm of architects, Messrs. P. and B. Gregory, have been appointed architects for the new Cathedral of Christ the King, Johannesburg.

Tree Preservation

The L.C.C. Parks Committee reported to the Council in May last year that for an experimental year they proposed to accelerate their programme for making tree preservation orders, involving the employment of extra staff for the purpose. A start on this accelerated programme has now been made, staff with the necessary qualifications having been recruited.

Six Orders made by the Council have been confirmed so far, and during the past six months another eighteen orders have been initiated in the Parks Department. So far the emphasis has been on the protection of trees in Kensington, the Council of that Borough having requested the Council's special interest, but Hampstead, Lewisham and Wandsworth have also received some attention.

The object of these Orders which are made under Section 28 of the Town and Country Planning Act, 1947, is to protect the trees which are considered to enhance the amenities of the neighbourhood where they are situated. *The making of an Order does not prohibit felling, topping or lopping, but requires that the Council's permission must first be obtained.* Many large forest-type trees grow on sites for which they are unsuited, and therefore need regular and drastic cutting which ruins their appearance. Subject to the planting of a smaller-growing type of tree, the Council freely agrees to the removal of such trees, and thus helps to avoid the trouble and cost of recurrent cutting.

The Council will likewise not unreasonably withhold consent to the felling of a tree or trees impeding a development which the Council would otherwise approve under its planning powers, but in appropriate cases, replacement of trees elsewhere on the site may be a condition of the consent.

Disregard of the provisions of an Order renders the offender liable to prosecution.

Tree preservation orders do not empower the Council to require the felling or lopping of trees—anybody who feels aggrieved about the size or condition of a tree or trees growing near his property should approach the person responsible for the premises where the trees are growing.

Under the auspices of the Metropolitan Public Gardens Association, a lecture was given on tree preservation by one of the Council's staff, and the Council is seeking other means of fostering local interest in the subject, especially in the areas most in need of tree preservation, where almost any tree can be an attractive amenity. Among other suggestions was the proposal that labels might be fixed on to suitable trees by owners who may be willing to co-operate, but this attractive idea has so many practical difficulties that it had to be abandoned. In bulk, such labels are costly. It is essential to avoid damage to the trees by "throttling" and if placed too low

down, the plates will probably suffer damage; if placed too high, they will not be easily readable. Many trees which are to be preserved are too far away from public access for a label to be of any practical use and in other cases labels would be obscured from public view by buildings, etc.

The Council has no power to affix labels itself, and if some trees were not labelled while others were, the fact that a tree had no label would give countenance to the assumption, perhaps quite falsely, that the tree was not protected.

The latest tree preservation order concerns two groups of trees and 15 separate trees in Kensington. The first group numbers 69 trees in the garden enclosure of Royal Crescent, the second group is a line of five limes in the front gardens of Nos. 72-78, Norland Road, while the 15 individual trees are at various addresses in Royal Crescent, St. Ann's Villas, Norland Crescent and Addison Avenue.

Norwich Association of Architects Dinner

Mr. Howard M. Robertson, M.C., A.R.A., S.A.D.G., the President of the Royal Institute of British Architects, replied to a toast to the Royal Institute of British Architects at the biennial dinner of the Norfolk and Norwich Association of Architects at the Royal Hotel, Norwich, on March 6th. He said: "Architects to-day would like to do many things but they have a fear of the journals and of the licensing authorities. The trouble with the new towns is that they are wonderfully clean and healthy but are lacking in unexpected pleasures. In the new towns it is always lunch time—never dinner-time." Looking forward to the time when the bomb scars of Norwich would be covered by new buildings, Mr. Robertson said he hoped the buildings would be of a free character of architecture developing into a national and a local style and that the opportunity would be made for the architects to do what they thought was right for all types of building.

The Lord Lieutenant of Norfolk (Sir Edmund Bacon), who had proposed the toast, said that the architect employed his art under difficult circumstances. The painter, the writer and the composer could destroy what they had created if they did not like it. The architect was in a different position. What he built was permanent. "There it is for richer, for poorer; for better, for worse till bomb doth it blast," he said amid laughter.

Sir Edmund said that although the great residential palaces had gone they had been replaced by equally great buildings such as offices and even power houses. It was still a world where there was room for great architects.

A toast to the Norfolk and Norwich Association was proposed by Mr. H. G. Strauss, M.P., Q.C., Parliamentary Secretary to the Board of Trade. He

told members that they were the representatives of a great profession in a county which had some of England's loveliest villages in some of its loveliest countryside.

He paid a tribute to the late Mr. C. H. James, R.A., who had been a great lover of the city for which he had done some of his best work. Apart from his work Norwich was enriched by many buildings including the Assembly House in which the greatness of architects of the past had been worthily restored by architects of the present.

Mr. Strauss commented on the cry which he said was being raised against uniformity. "As though anyone objects to uniformity," he said. "All horror would be horrible but you do not improve it by breaking it up and having a variety of horror."

Mr. Strauss said he believed that there were two things necessary to a civilized life. They were a good country and a good town. The town gave the civic virtues and the country gave natural beauty and solitude. Each had its characteristics and the two should not be blurred. "Nothing is easier than to destroy both by a universal suburbia," he said. "In the long run we shall preserve both town and country or we shall preserve neither. You will never preserve the countryside while people regard the town as a place from which to flee, and you will never keep people in the town happy if they have not access to a fair countryside."

The chairman, Mr. C. H. Thurston, president of the Norfolk and Norwich Association, who replied commented that there was an increasing awareness in the public mind of architectural matters. "We do not think there is enough—there should be more—but that there is some is a good sign," he said. "Some of our members are doing some very good work and we hope they will continue to do so."

He looked forward to the time when the accent would be less on building houses so that work could begin filling the unsightly gaps in the bomb-scarred city and putting up new buildings which the city could be proud of on the site of the decaying property.

A toast to the guests was proposed by the Lord Mayor of Norwich (Mr. W. E. Walker) and the chairman of the Norfolk County Council (Lt.-Col. B. M. M. Edwards) responded.

American Architectural Award

Lever House, the new glass and stainless steel building of Lever Brothers Company, New York, this week was honoured with the award as the outstanding building of 1952 by the American Institute of Architects.

The architects of Lever House, Messrs. Skidmore, Owings & Merrill, were similarly honoured. The awards were presented by Mr. Glenn Stanton, national president of the American Institute of Architects, at the 84th anni-

versary dinner of the New York Chapter of the American Institute of Architects at the Hotel Biltmore, New York.

OBITUARY

The death has occurred, on March 21, of Mr. Robert Raeburn Grieve, F.R.I.A.S., F.R.I.B.A., at Edinburgh.

COMING EVENTS

Royal Institute of British Architects.

April 10 till May 2. Monday-Friday 10-7, Saturday 10-5. Exhibition of Mural Paintings, at 66, Portland Place, W.1.

The Royal Institution of Chartered Surveyors.

April 13 at 5.30 p.m. Ordinary General Meeting. Address on "Modern Housing Construction," by R. W. Wates, at 12, Great George Street, S.W.1.

April 15 at 6 p.m. General Meeting. Address on "Quantities and Qualities," by Richard Sheppard, F.R.I.B.A., at 12, Great George Street, S.W.1.

The Illuminating Engineering Society.

April 14 at 6 p.m. Sessional Meeting. A paper on "Sports Lighting," presented by M. W. Peirce, at the Lighting Service Bureau, 2, Savoy Hill, W.C.2.

Royal Society of Arts.

April 15 at 2.30 p.m. Talk on "Materials Handling and Processing," by L. Landon Goodman, B.Sc., A.M.I.Mech.E., A.M.I.E.E., of the British Electrical Development Association, at John Adam Street, W.C.2.

Council for Visual Education, Annual Meeting.

April 15 at 2.15 p.m. Speaker, Sir Hugh Casson, on "Architecture and the Decorative Arts." Sir Patrick Abercrombie will preside. The Housing Centre, 13, Suffolk Street, S.W.1.

Institute of Landscape Architects.

April 16 at 6 p.m. "The Historical Evolution of the English Landscape," by Professor H. C. Darby, O.B.E., M.A., Ph.D., at the Housing Centre, 13, Suffolk Street, Haymarket, S.W.1.

Society of Chemical Industry.

April 16 at 6 p.m. Annual General Meeting. "Road Surfaces as Reflectors of Light, from the Point of View of Street Lighting," by A. W. Christie, of the Road Research Laboratory, Dept. of Scientific and Industrial Research, at The Building Centre, Store Street, W.C.1.

Whitechapel Art Gallery.

April 9-May 31. Daily 11-6, Sunday 2-6, Closed Mondays. Exhibition of XXth Century Form in Painting, Sculpture and Architecture, at High Street, E.1.



Leamington House from East

PADDINGTON BOROUGH HOUSING

Architect: R. A. JENSEN

Director of Housing, Paddington

Assistant Architect: Miss B. COOK

LEAMINGTON HOUSE

THIS small block of 12 flats represents one solution to a problem which increasingly concerns Metropolitan Boroughs and other authorities with closely built-up areas which have suffered a degree of War Damage. Most of the major sites having now either been redeveloped or plans are well advanced for so doing, and it is only the small sites, usually with a limited frontage, which now remain available for permanent housing schemes unless considerable decanting operations are resorted to.

Since these small sites are both limited in frontage and usually in depth, and involve relationships with existing buildings, they present certain practical difficulties. In the case of this scheme there were, moreover, other difficulties involved in the peculiar levels of the site.

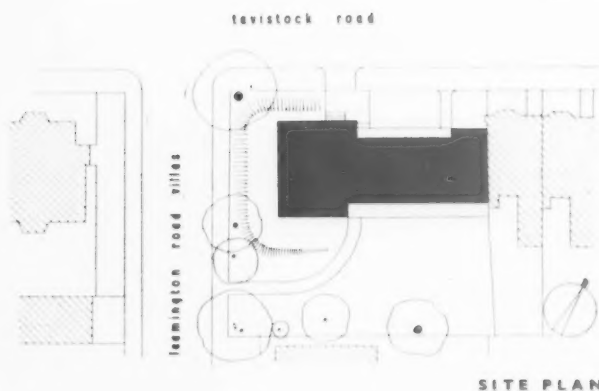
In order to avoid excessive under-building existing levels have been

utilized to the greatest possible extent, and for that reason the floor levels vary; with some of the flats accessible from a balcony leading off the full landing, and others at half landing level. Where some under-building could not be avoided the space has been put to profitable use by the inclusion of storage accommodation for prams, cycles and trunks, etc. Furthermore, the garden lay-out has been planned in such a way as to take

advantage as far as possible, and turn to good account the undulations in the site.

As will be observed, the site is on a corner, thereby leading to some elasticity and freedom at least on one flank. Four-storey terrace houses with basements adjoin the other flank and, although the existence of this property could not dictate the design, its existence had to be recognized.

The accommodation provided con-



SITE PLAN

sists of 8 three-room flats, which are still the greatest need, and 4 two-room flats disposed in four storeys. Four of the flats have direct staircase access and the remainder balcony access, for reasons already indicated. All have private balconies accessible from living-rooms and have habitable rooms facing South.

The rent level of these flats was a critical part of the problem which it was set out to solve, and which, indeed, was solved. This involved a minimum specification of the utmost simplicity, but, at the same time, retention of good housing standards. Whilst, therefore, the scheme has proved to be a sound one economically, it is, at the same time, not noticeably devoid of any of the essentials. Luxuries such as heated drying cupboards, however, were considered to be an item that could well be dispensed with, and for this reason and because, even in London it is thought by many to be desirable, arrangements have been specifically made for the outdoor airing of washing.

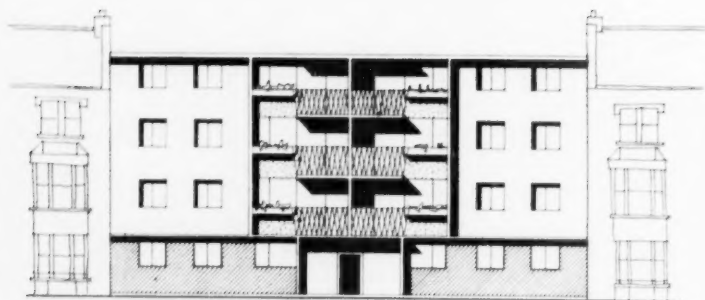
The construction is in reasonably orthodox system of load bearing external and spine brick walls with cellular clinker partitions and hollow tile reinforced concrete floors and roof. The bricks used externally are a yellow colour concrete, and this brick has also

[Continued overleaf



Leamington House from South

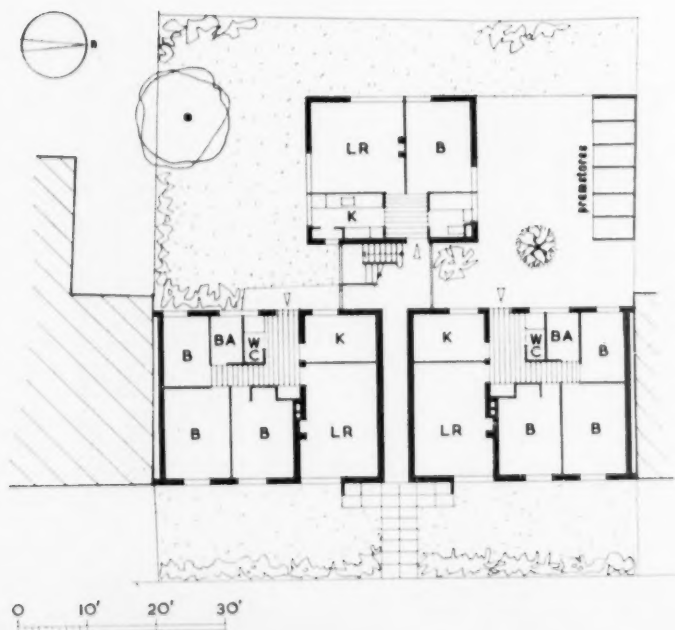




ELEVATION. PORTNALL ROAD SCHEME



TYPICAL FLOOR PLANS



been used with a fair face finish to the staircase.

The balcony reveals and soffits are finished in white cement with duck egg green rear walls. The balustrading infilling panels both to balconies and staircase are in Georgian wired glass. The roof is covered with a lightweight screed and felting.

Plastic composition tile floors and skirtings have been used throughout internally, and a bright colour scheme of varying colours, including lemon yellow, beige, Arctic blue and willow green internally to walls and cupboards and carried out in plastic emulsion paint.

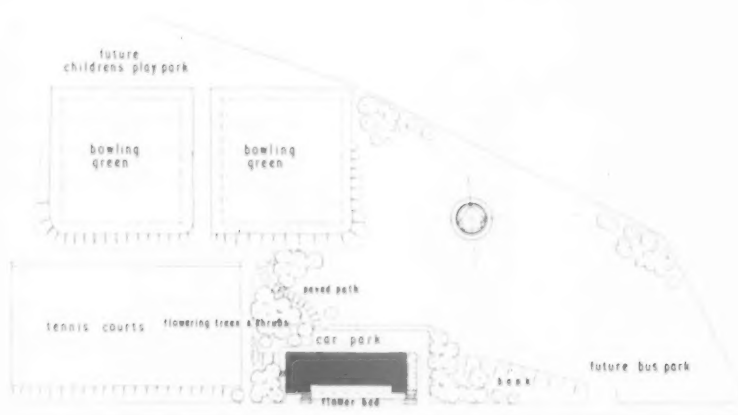
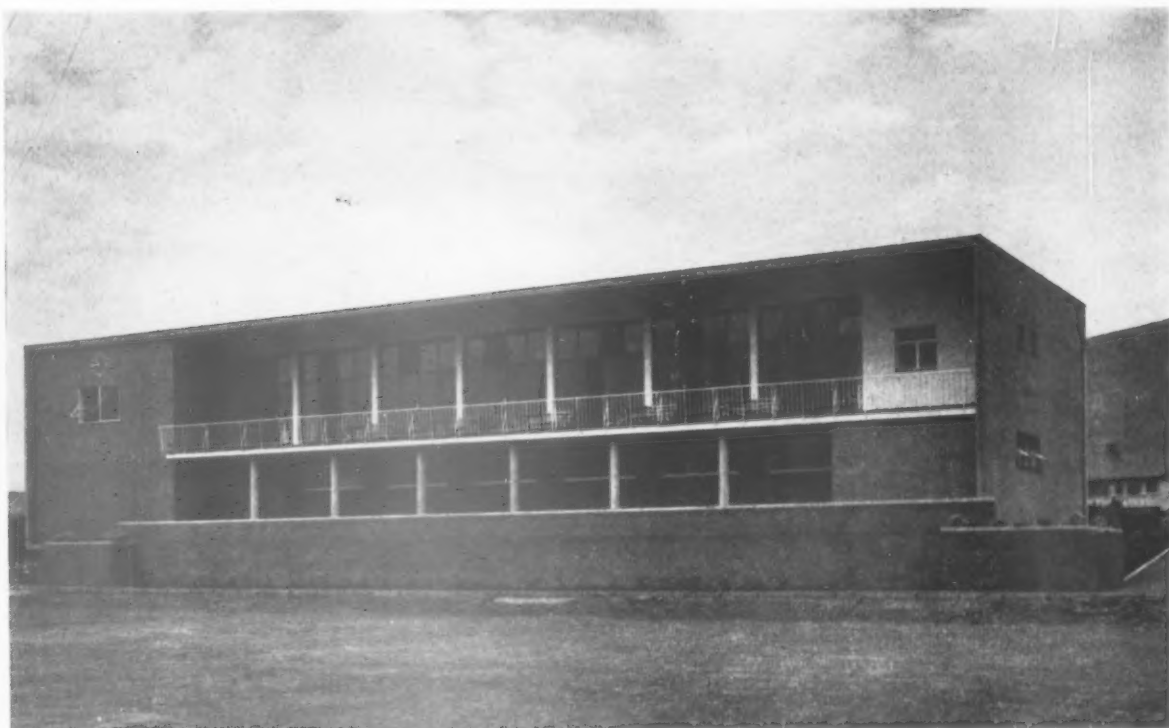
The general contractors were C. Pitt and Son, Ltd.

PORTNALL ROAD SCHEME

This proposed scheme again is a further variant of the small site "in-filling" problem, but under rather different conditions. In this instance the site was of limited frontage, having previously been occupied by four three-storey terrace houses before they were bombed. The site was level and of reasonable depth; and for this reason it was felt that to obtain the maximum benefit the planning of the scheme might seek to exploit not only the immediate frontage but also the garden space at the back. As will be seen from the plan, two flats with a sort of Studio character of the type frequently associated with the old Mews have been sited at the rear of the main block with a common staircase giving access to all flats.

In this instance a "tailored fit" had to be provided with existing property on either side, and this renders the planning singularly difficult and inelastic. The property on either side is such that a frank breakaway seemed to be the only possible solution.

The scheme provides accommodation for a four-storey block, therefore on the road frontage containing six four-room flats and two three-room flats; the blocks being linked by an open prefabricated steel staircase with central tunnel access from the road through the four-storey block at ground floor level. All flats are directly accessible from the staircase, and pram and cycle stores are being provided externally for a proportion of the flats. A refuse container enclosure is also provided at the rear of the site since, in this case, it was not considered justifiable to include refuse chutes.



New Sports Pavilion

FOR THE STEEL
COMPANY OF WALES
Abbey Works

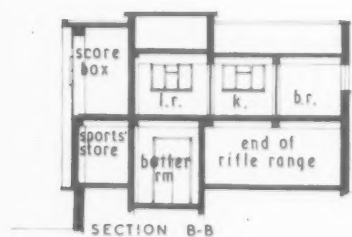
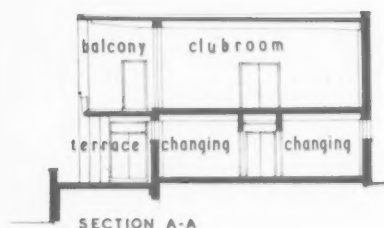
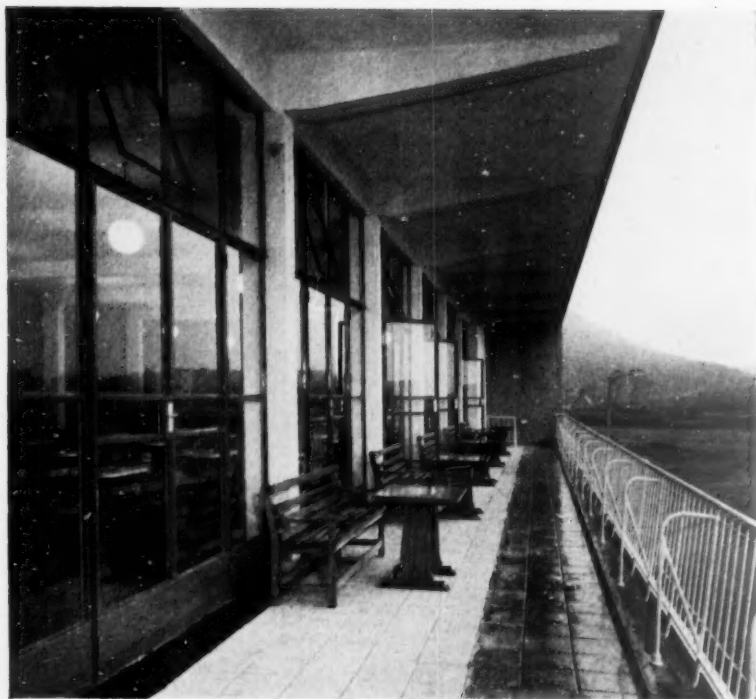
ARCHITECTS:
SIR PERCY THOMAS
& SON

THE building has two storeys, faces south with both a terrace and a balcony looking directly over the square and main rugby pitch.

The main entrance to the building is on the north side, opening into the staircase-hall, which gives access to the changing rooms, lavatory accommodation, the club room and warden's flat on the first floor, and the terrace on the south side of the building.

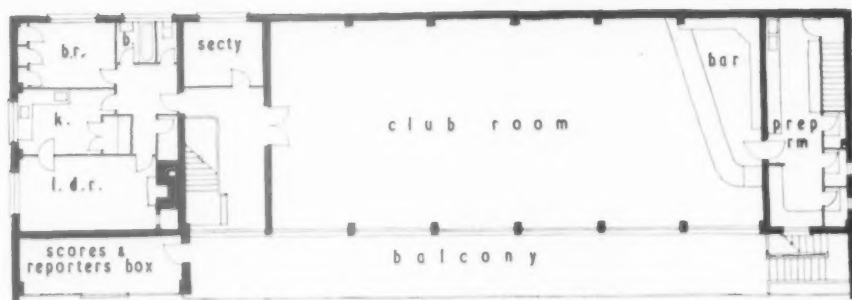
The changing accommodation, all of which is situated on the ground floor, consists of four men's changing rooms, the two largest being 24ft x 12ft each, and the smaller ones 18ft x 12ft each. There is separate changing accommodation for women with their own entrance and lavatory and toilet accommodation, also a changing room for boys.

The male lavatory block comprises eleven shower baths, six wash-hand basins, four W.C.s and urinals. On the ground floor there is also the boiler room to accommodate the gas-fired heating boiler, a sports store opening from the

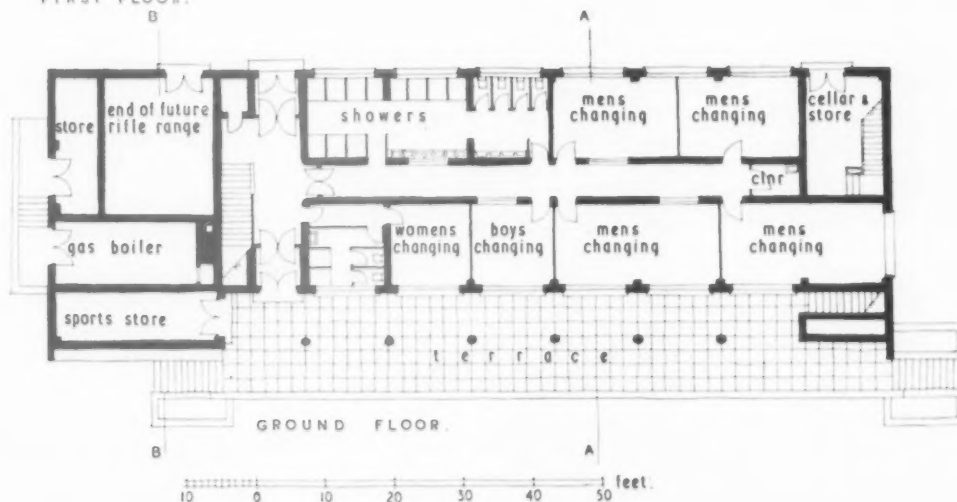


terrace, and a beer cellar and store with direct access to the bar services.

The main club-room is on the first floor, which, together with the Scorer's and Press Room, faces south on to the balcony, and is entirely glazed on this side. The club-room measures



FIRST FLOOR.



GROUND FLOOR.

72ft x 30ft and has a large bar with a kitchen behind capable of preparing sandwiches and light meals for serving in the club-room. The warden's flat is also on the first floor at the west end of the building, the accommodation comprising a living/dining room, kitchen, double bedroom, bathroom and W.C., with ample built-in storage and clothing cupboards.

The building is constructed with part load-bearing walls and part steel frame, due to the necessity of economy in the use of steel during the period of construction. The external finishes are mainly silver grey Tyrolean rendering with golden brown facing bricks to the terrace wall and external steps.

The circular concrete columns supporting the lower balcony have a bush hammered surface.



Sports Pavilion Abbey Works

ARCHITECTS:
SIR PERCY THOMAS & SON



H. W. WILLIAMS
PRIZE 1952

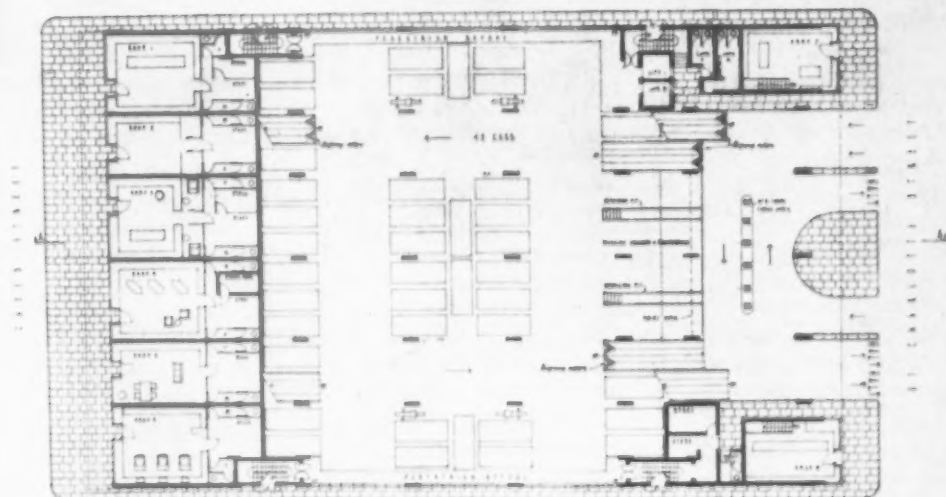
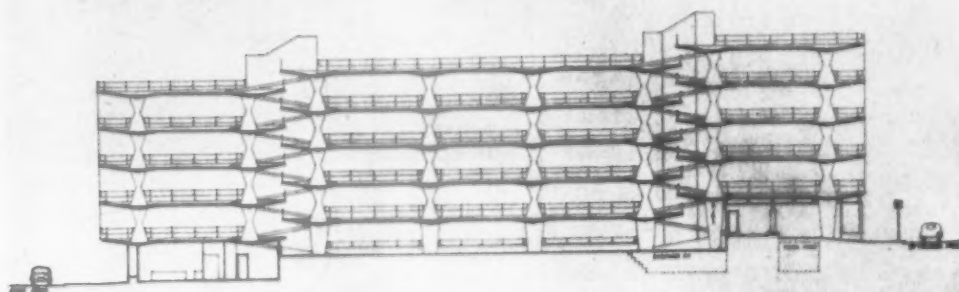
**A Multi-Storey
Car Park**

BY K. W. PATERSON,
A.R.I.B.A.

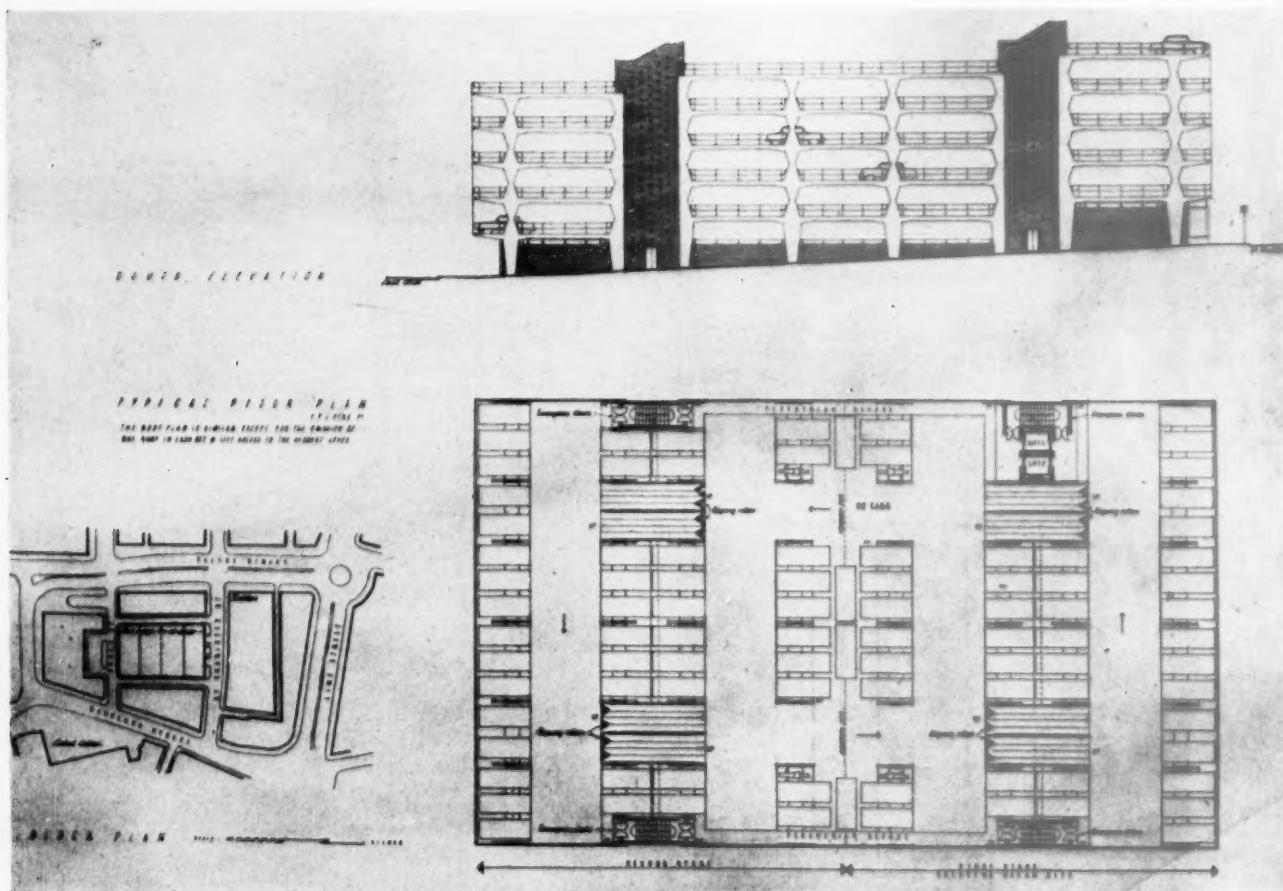
This prize, which is awarded by the Liverpool Architectural Society, had as its subject a Multi-Storey Car Park. The prize was won jointly by Mr. Neale T. Evans, B.Arch., A.R.I.B.A., David N. Skinner, and Mr. K. W. Paterson, A.R.I.B.A., whose design is illustrated on this and the following pages



**Below: Section and Ground
Floor plan.**



SECTION
PLAN
SUBJECT: LYMINGTON
SCALE: 1/4" = 1'

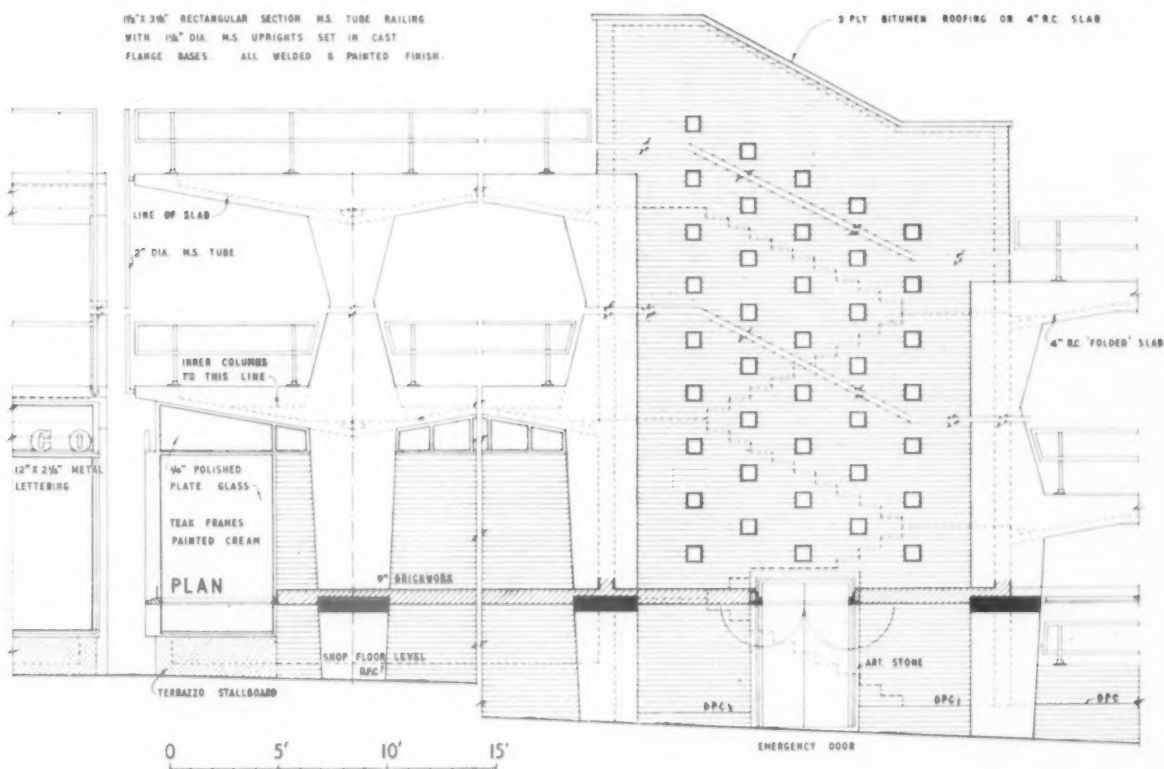


Multi-Storey Car Park: South Elevation and Typical Floor Plan

PLANNING : Access is limited to one end for ease of supervision. Great Charlotte street was chosen so that half the building could be erected on existing vacant land. It is also the wider street. Vehicles are to ascend and descend whilst travelling round the building anti clockwise. The four sets or ramps ensure access even if one set becomes obstructed. All turning circles are based on a 20ft radius. Access to the petrol filling station is normally by the narrower crossing from the street, but cars may afterwards proceed straight on the ramps. The station may also be used when leaving the car park. Standing is provided at the rear of the pumps for petrol delivery lorries with turning circles larger than 20ft—access is at one point only—to two lifts on one staircase. Access from level to level on each floor is facilitated by pedestrian refuge ways linking two staircases on each side of the building. There are thus four enclosed escape staircases giving on to the street at the lowest level. Apart from the servicing pits, there is no basement where carbon monoxide fumes could accumulate.

CONSTRUCTION : Main upper floors are to be of 4in reinforced concrete folded slab over bay, size max. 22ft long by 30ft wide, stiffened at free edges. This has the advantage of lightness, strength and stiffening in a direction parallel to Cases street. Columns are shaped to give stiffening in the other direction, being reduced in section corresponding to shear diagram. The main structure is built in four structurally independent sections at three different levels. Expansion of the main structure is thus reduced to manageable proportions. All ramps are independent of main structure. They are constructed of prestressed concrete slabs hinged at the top and sliding at the bottom. Aligning rollers are installed at the leading edge of each ramp to ensure that cars centre themselves on the ramp. All staircases have r.c. flights enclosed in 9in brick towers. All main ground floor partitions in 9in brickwork.

FINISHES : Externally exposed concrete surfaces—retarder painted on formwork and aggregate exposed by brushing after removal of formwork. Brickwork to be finished in dark brown wirecut facings with flush joints in brown coloured mortar. Brick was chosen as an alternative to concrete for a contrast in colour and texture. All window frames finished cream, all protective railings, etc., Swedish red. Total accommodation 500 cars.



Multi-Storey Park: Detail

Annual Meeting of Norwich and District Association of Building Trade Employers

At the annual meeting of the Norwich and District Association of Building Trades Employers held at the Castle Hotel, Norwich, the regional president, Mr. P. J. C. West, told members that he thought the scope for private enterprise house building was considerable and the extensive representations made by the National Federation had produced results. Price was now the deciding factor. "It is of the greatest importance that we should examine every aspect of the organization of our industry to ensure that prices are kept down," he said. "All too often the builder is criticized for high prices because he happens to be the last man in a fairly long chain in the process of producing buildings."

"It is important to remember that perhaps 60 per cent or more of the price of our finished product is for materials, where prices are entirely outside our control. It is natural that we should look to the manufacturers and distributors of material to play their part in bringing down prices."

Commenting on the shortage of land, Mr. West said: "There is no point in

having freedom to build privately when land is short and, because of shortage, at a premium. I feel more can be done by the Government and local authorities to make available at reasonable prices land for private development."

He also dealt with the problem of building workers' hours during the summer. In Norwich, members were concerned that the summer working day was eight hours instead of the eight-and-a-half operating in the rest of the region. "It certainly is surprising to reflect that the normal working day in summer time should be limited in Norwich to eight hours, while elsewhere another two-and-a-half hours a week are being worked." The Association was now seeking to have the hours extended.

The material supply position now showed some improvement, with the exception of bricks, supplies of which were still inadequate for the needs of builders, he continued. The long delivery dates being quoted had a very real bearing on production and he suggested that every effort should be made to save bricks and use substitutes where possible.

Commenting that the membership of the region remained at just over 2,000,

Mr. West said that the Norwich Association was by far the largest in the region and had played an outstanding part in its progress. He congratulated those who had helped to stem the recent floods and repair the damage.

The meeting decided to send a resolution to both the Norwich and the Norfolk educational authorities stating that the Association was not satisfied with the present standard of education. The resolution was proposed by Mr. R. Norgate and seconded by Mr. M. J. Youngs and passed unanimously.

Mr. Norgate said that many lads who came into the trade could not assimilate the teaching of the Norwich City College. The standards might satisfy the educationalists but they were not good enough for boys entering the trade. Mr. Youngs was in full agreement. "The sooner we get back to the basic essentials of education and cut out visits to museums the better it will be," he said.

Officers elected for the coming year were: President, Mr. R. E. Carter; Senior Vice-President, Mr. H. R. Wilkins; Junior Vice-President, Mr. N. Howard; Hon. Treasurer, Mr. S. T. Gill; Hon. Assistant Sec., Mr. C. H. Sutton.



NEW PRESTRESSED BRIDGE at Hunters Inn, North Devon

R. B. CARNEGIE, C.B.E., M.I.Mun.E.
County Surveyor

E. W. H. GIFFORD, B.Sc., A.M.I.C.E.
Consulting Engineer

DURING the Lynmouth disaster last August ten bridges were destroyed. The Martinhow Bridge at Hunters Inn is one of the first to be replaced with a permanent structure.

The opportunity was taken to realign the road and widen the river Heddon, the new scheme calling for a span of 40ft with a skew angle of 57 degrees, also the depth of the structure was to be as little as possible to allow for a considerable rise in the water level. Therefore it was decided to use prestressed concrete. It was not possible to use full length precast beams and the "Udall Beam System" was adopted.

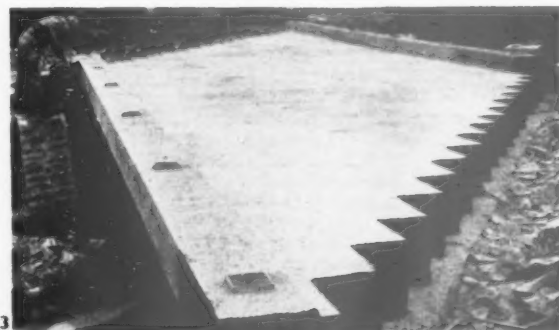
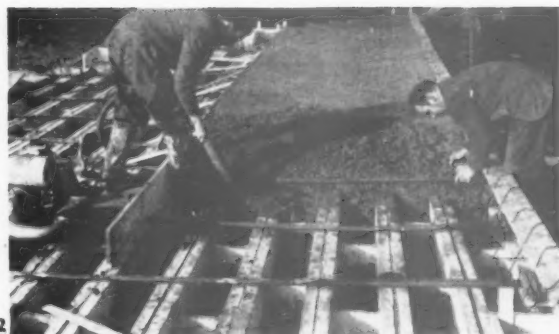
The first picture shows hollow trough units placed head to tail with a solid anchor block at each end. In each beam are three prestressing cables, held in position by diaphragms at regular intervals, two cables are pre-tensioned and one, covered with a plastic sheath, is post-tensioned three days after concreting has taken place. The Freyssinet system of prestressing was used.

The second picture shows the concrete being placed and a poker vibrator being used to ensure a good bond to the pre-tensioned cables. Transverse cables can be seen in thin plastic sheaths for post-tensioning; on the right are the transverse anchor cones and reinforcement to strengthen the lip containing these cones.

The third picture shows the finished bridge deck; the anchor cones have been covered with special facing units which also carry a timber parapet fence; the edges are protected by a method of waterproofing.

The bridge deck, despite bad weather, was completed in the equivalent of three weeks' working time at a cost of 35s. per sq. ft. The stone-faced mass concrete abutments and the timber parapet fence were designed and built by Devon County Council. The main contractors were J. J. Udall's Building Co. Ltd., of Southampton, and the precast units were made by the Liverpool Artificial Stone Co. Ltd.

 The completed bridge



THE ARCHITECT AND INCOME TAX

IT is not my intention in this article to try to show you how to evade paying Income Tax—even if I knew how—but to explain, particularly to the younger architect who is considering commencing in practice, what you might rightfully claim against your business.

Income Tax is, for some mysterious reason, a subject which is never, as far as I can ascertain, mentioned in books on professional practice nor spoken about in classes dealing with this subject. One is just left to struggle along as best as one can with the subject, or should I say with the Inspector of Taxes, whose job is naturally to try to extract as much as possible from the returns you make. As everyone appears to look upon Income Tax as fair game for a certain amount of latitude of the conscience, this attitude of the Inspector is understandable. *I am informed that if everyone paid his rightful amount the rate of tax could no doubt be reduced by 1s in the £.*

My first advice is to secure the services of a chartered accountant. This is not a waste of money by any means, but, as I myself have proved, can be a saving and does lift a tremendous load off your shoulders. I know full well that you can prepare your own accounts and submit them to the Income Tax Authorities, but it is false economy. You are not trained as an accountant and why then should you try to do his work? You expect clients to come to you when they wish to build a house because you are an expert. The same principle applies. Don't try to do it on the cheap by getting someone in an accountant's office to do it in his spare time; go and place your whole business in the hands of a qualified accountant. He can be a tower of strength to you on any point dealing with accounts.

I have found it pays to have my accounts audited and certified by my accountant. There is no denying that they carry far more weight with the Inspector of Taxes than if I had made them up myself. I leave the accountant to do all my negotiations with the Inspector. I must point out that an accountant worth his salt will not allow any "cooking" of the accounts, but on the other hand he will see that you are allowed every penny due to you and will fight hard if he thinks you are not getting a fair deal.

If you do not know of an accountant or perhaps you know of a number by name only and have no guide to their ability, I would suggest you seek an interview with the Chief Inspector of Taxes. Don't be put off with a counter clerk. Make an appointment to see him, explain your case and ask his advice as to with whom you should place your business. Not only will he be flattered but you can rest assured that whom he advises is honest and is a person whose word is accepted with the Inspector. This you will find from

later experience to be a valuable asset in your favour.

Having secured the name of a suitable accountant, fix up an appointment with him as soon as possible. If you are just commencing in business for yourself, he will advise you on that unfortunately necessary evil (or so I think), bookkeeping. If you can, from the beginning, commence with a simple but effective bookkeeping system, half your battle is won. I plead guilty to having a most haphazard system (not even a system) my first year until I sought the advice of an accountant.

Whilst bookkeeping could easily form the subject of a separate article, I found that to begin with all I needed was a postage book, petty cash book, fees book and ledger.

Without some sort of system of books such as outlined above, you will have great difficulty in making up at the end of the year a profit and loss account, and a balance sheet. For Income Tax purposes I find the 4th of April the best day to close my books, as this is the end of the tax year. You need not take this date and in fact there is often advantage in selecting a date one year from the date on which you commenced your practice.

As an architect in private practice, you are entitled by law to be regarded as carrying on your own profession as an architect and thereby will be assessed under Schedule D, Class II. This allows you to submit to the Income Tax Authority a profit and loss account. This does not mean that you need incur a loss but rather that you will not be taxed on the full amount of fees earned. You are entitled to deduct all expenses necessarily incurred in the execution of your profession as an architect. You don't imagine that these would amount to much until you commence on your own account. You will then find that they are more numerous and costly than you ever imagined. You will find it advantageous to keep a record of everything, particularly when tax is so high.

What can be entered as expenditure for tax purposes? I will mention in the first instance the straightforward items and deal with the controversial afterwards. (1) Salaries, excluding your own. (2) Secretarial fees if you have your typing done outwith your office. (3) Postages. (4) Telephone account. (5) Stationery (including ledgers, etc.). (6) Repairs to and renewal of office equipment. (7) Traveling and subsistence. (8) Insurance of staff and office. (9) Renewal (but not original cost) of reference books, etc. (10) Periodicals, if reasonably necessary in the performance of the work of architect. (11) Subscriptions to professional institutions connected with architecture. (12) Rent, rates, lighting, heating, repairs to building, cleaning, etc., of the rooms used by the architect. If the rooms are used solely for the purpose of an office the full cost of above can be charged. If the

office is part of the architect's house a proportion of the total cost of the items may be charged.

The above twelve items are by no means hard and fast. They could no doubt be added to but they are intended as a guide.

The controversial subjects include entertaining expenses. These will be allowed if incurred wholly necessarily and exclusively for the purposes of performing the profession of an architect. This is an item with which your accountant may have some difficulty in securing an arrangement with the Revenue Authorities as they are apt, through past abuses, to be very conservative on the subject. If, however, you can show that they have been necessarily incurred, insist on an allowance.

The question of travelling allowance has been a bone of contention with many firms. There is no difficulty regarding expenses incurred if one travels on business by train or bus or even air, but when it comes to a car, well the fun commences. If a car is kept solely for office use, all the expense of running and maintaining the car can be included, as can the depreciation. If, however, you use the car for your own private use as well as the office, I suggest you work out a fair (another word for honest!) proportion of the cost and charge it in your balance sheet. I make a note of the mileage for each job and general office running and also my own private running. If, therefore, the Tax Authorities doubt the amount I can supply my accountant with supporting evidence of my claim.

I have always had difficulty in understanding, although I have had the point most carefully explained, why if I buy, say, office furniture, I can't include this item in my returns. Certain items such as furniture, typewriters, etc., are looked upon as capital, or in the words of the Tax Authority as "plant and machinery."

Do not forget that once your office furniture has been used it is second-hand and therefore you should see that, in your annual accounts, these items are included at their correct market value. A sum should be included in your statement for depreciation. This will reflect in your profit and loss account and thereby present at the year's end a true picture of your financial stability.

Whilst you cannot include items such as the above, you can, if you have had to borrow the money to buy them, include the interest charged against the loan. Your banker will provide you with a yearly certificate of interest charged.

There may be points which I have not touched upon that are relevant to this subject, particularly for the young architect. Income Tax is a subject which can cause a needless amount of worry, other than having to find the amount demanded.

MAURICE TAYLOR

TESTING OF MODEL BEAMS at the School of Architecture, College of Arts and Crafts, Nottingham

DIRECT knowledge of the behaviour of structural elements should form part of the curriculum of architectural students. The following sketch design was set towards that end.

Two identical beams of any form and to span 2ft had to be built, their width not exceeding 2in nor their depth. The materials to be used were limited to $\frac{1}{4}$ in Balsa Wood sheeting, $\frac{1}{8}$ in \times $\frac{1}{8}$ in Balsa strips and 5 amp. copper fuse wire. The efficiency of the beams, to be tested to destruction, to be calculated on the ratio : self-weight of beams to load carried ; load to be applied on two 2in strips $\frac{1}{3}$ length from each end.

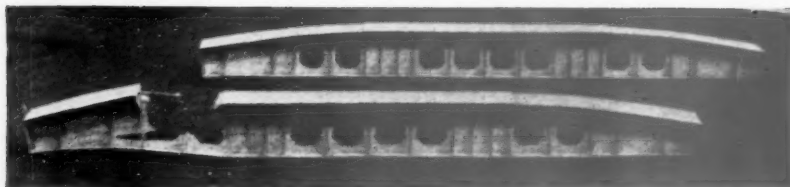
The materials and sizes were selected to make the experiment as close to reality as possible. The combination of Balsa Wood and copper wire was chosen to make possible steel, steel and conc., and concrete design forms. Comparison on the ratio selected allowed the greatest variety of solutions and brought into play the critical point of economy.

Result : The drama of the testing attracted the whole school, staff and students. The behaviour of the beams approximated sufficiently to reality to make the tests valuable lessons in construction. Box beams, curved laminated trusses, trusses with Balsa compression and wire tension members, solid and triangulated space frames, plated girders and some rather dubious original designs were among the submissions.

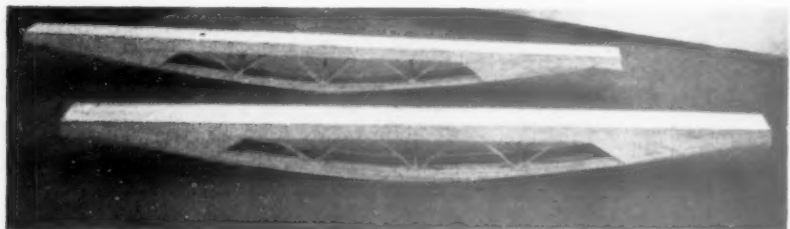
On the whole the strength of beams was surprising, and the spectacle of two Balsa Wood beams 2in \times 1in carrying a load of over 1 cwt (68 kg., 800 times their own weight) proved exciting and unexpected. The prepared test loads of bricks and sand had to be supplemented by hastily weighed additional bricks placed in buckets, two high, on top of the loading frame already suspending the originally designed container.

A box beam closely followed by a space frame and another box beam with curved boom and prestressed tension members proved to be best, and in a class by themselves. The curved laminated truss came next.

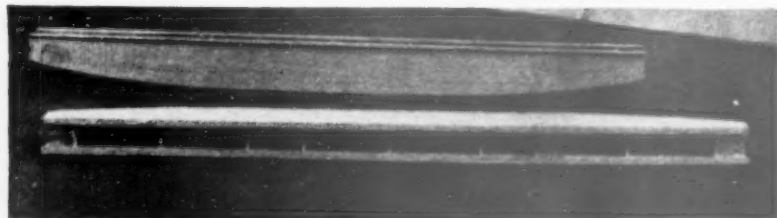
Bad model making influenced the



1. Plate girder. Gordon Cheney. Failure, due to shear, occurred along a cut in the web, made by mistake during manufacture of beam. The holes made in the web considerably weakened the beam.



2. Curved laminated beam. M. J. Topliss. Failure was due to shear in the compression member under loads and subsequently in the tension member. The tension member was too strong and some of the material in it could have been used to make the compression member into a hollow box section, giving greater strength without increasing overall weight.



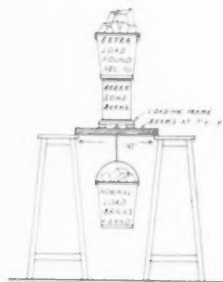
3. Box beam. J. D. Pike. The beam sheared along its top flange due to failure of a horizontal glue joint.



4. Space frame. Marsden. The two beams failed simultaneously through shear.



SOME TYPICAL RESULTS			
	Wt. of Beams	Load	Ratio Load over Wt.
Marsden (Space Frame)	41 gm.	33,218.2 gm.	810.2
Pike (Box Beam)	79.5 ..	64,274.0 ..	808.5
Topliss (Curved Laminated)	69.5 ..	47,890.0 ..	689.0
Cheney (Plate Girder)	43.0 ..	14,965.0 ..	348.0



A vertical stack of bricks 2ft higher than shown in photo was required to produce failure.



SIDE ELEVATION



PLAN OF BEAM

1/2" = 1' 0"



CROSS SECTION THROUGH BEAM

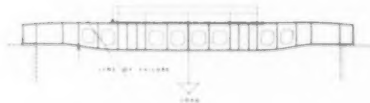
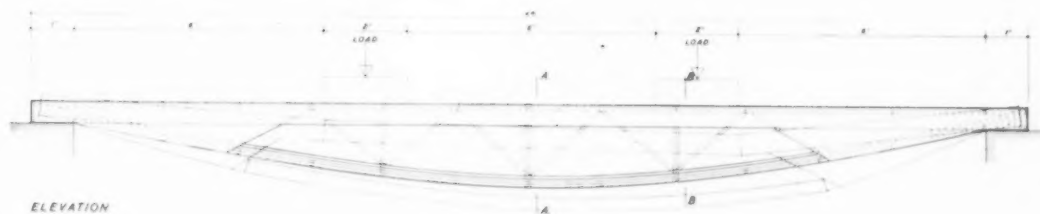
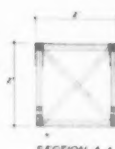


DIAGRAM OF BEAM DEFORMED UNDER LOAD

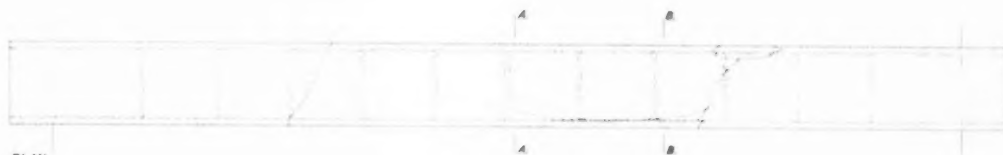
Plate girder. Gordon Cheney.



ELEVATION



SECTION A-A

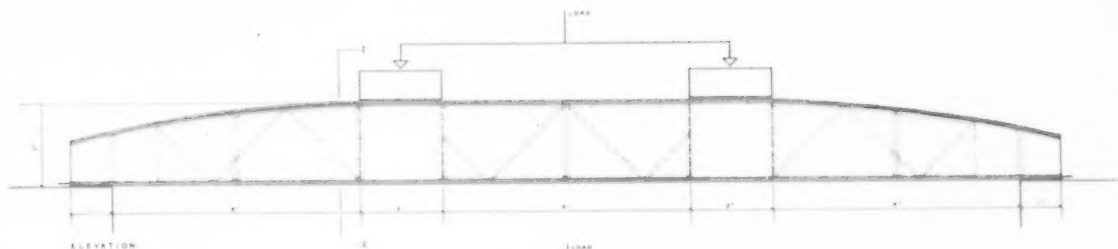


PLAN



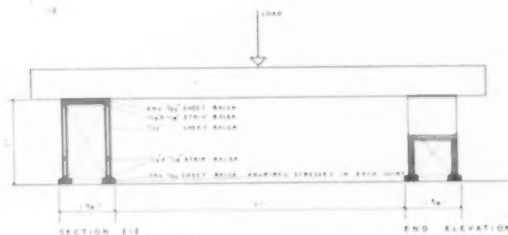
SECTION B-B

Curved laminated beam. M. J. Topliss. Below:—Box beam. J. D. Pike.



ELEVATION

SELF WEIGHT OF BEAMS 1/2"
ULTIMATE LOAD 4000 LBS
VARIABLE LOAD 4000 LBS
SELF WEIGHT 1/2"
THE BEAM BUILT UP ALONG THE TOP FLANGE
DUE TO THE FAILURE OF A BOX-BEAM
UNDER LOAD



SECTION E-E

END ELEVATION



DIAGRAM OF BEAM FAILURE

results very much less than had been anticipated. The experiment made clear that many improvements are possible. There is considerable doubt whether the copper wire is the best material; its lack of elasticity and tendency to stretch are undesirable qualities.

The rigid loading frame tended

to cut into the compression flanges as beams bent; this could be taken care of by hinging or pivoting the frame members.

The help given by the Nottingham and District Technical College, both with equipment and in the critiquing, contributed greatly to the value of the exercise. Architects and engineers

were agreed that the programme had demonstrated clearly many principles of construction and design, which remain unappreciated after lectures and study. Here was circumstantial evidence of the close relation between theory and practice in structure; a vital lesson was learned in a vivid way.

PAUL RITTER

TOWN PLANNING, HOUSING AND LOCATION OF INDUSTRY

Statement by Executive Committee of the Town and Country Planning Association

The Executive deplore any pressure on housing authorities to increase the proportion of flats in their schemes. This would be in effect an abandonment of one of the prime purposes of town and country planning—that of making possible both redevelopment and new development on standards of housing density satisfactory to the people of the country.

All surveys of opinion on preferences in types of dwellings have shown that the vast majority of British people (of the order of 90-95 per cent) prefer houses and gardens to flats. The latest confirmation of this is the experience of the new towns: for example, Crawley, Hemel Hempstead, Welwyn and Hatfield, who find the demand for flats does not exceed 5 to 7½ per cent.

Of course, a somewhat larger proportion tolerate flats where the alternative is a long journey to work; and the Executive have previously expressed the view that in central city areas up to 20 per cent of flats may be necessary and reasonably acceptable, and in some parts of those areas higher percentages may be unavoidable. But in 1952 20 per cent of all dwellings built by public authorities, in large and small towns and the country together, were flats—which is too many already. In London County from 1945 to 1951 only 2,630 houses were built as compared with 26,386 flats.

As stated by the "Living in Flats" Committee (Chairman, Mr. Henry Brooke, M.P.): "For one class of family in particular, the family with several children, it is well-nigh impossible to provide in flats a wholly suitable environment."

Economy of High Building

If building flats on expensive city sites were economical, there would be a conflict of what we desire and what we could afford. In the past there were economic and military arguments for building upwards. To-day the situation is reversed. What is socially and personally the more desirable is also the cheaper. It is urged in favour of high building that it would save farm land, which it would to a very small extent, and would thus enhance home

food production; but this latter is on balance doubtful, and in any case in this country's circumstances could not be conclusive.

The Executive holds that the conservation of good farm land for food production is a very important aim in planning, and that one of the major virtues of the Act of 1947 is that it has in fact removed over vast areas the threat of misuse by scattered and badly planned development. But the aim of providing efficient conditions for industry, and good communities and houses for the urban as well as the rural population, is also important. It is only in respect of a relatively small area that these two aims are in conflict, and in judgments within this margin economic costs, as well as the effects on living and working amenities, cannot wisely be disregarded.

The Executive consider that, for normal family housing, a density in excess of 15 houses a net acre, including internal roads and forecourts, but not including any public open space, is unsatisfactory.

The amount of land that can be saved by substituting flats for houses at 15 (about 52 persons) an acre, is insignificant in comparison with the cost. For example, at this density 10,000 houses (for 35,000 people) would occupy 666 acres, and 10,000 flats at 35 an acre would occupy 286 acres. Under the Housing Act of 1952 the combined subsidies on 10,000 houses, capitalized at 4½ per cent for 60 years, amount to £7,690,000; and the subsidies on 10,000 flats with lifts, on the cheapest city land (£1,500-£4,000 an acre), similarly capitalized, are £18,600,000. Thus the nation incurs an extra capital cost of £10,910,000 for a land economy of 380 acres; £28,700 extra is spent for each acre "saved." If land prices in the large cities are taken into account the cost to the nation is far greater. The rents for the flats and houses are much the same; the average floor area of the flats is in practice usually considerably smaller than that of the houses.

Further, food from home gardens, which has health value as well as financial value, is sacrificed. In addition, these gardens form a widely distributed reserve capable of full use in an emergency.

The amount of capitalized subsidy saved by avoiding flat building is not an abstract figure. It corresponds approximately to the difference in the actual expenditure on the development

and building of the two types of dwellings at the time of construction. The 10,000 flats use materials and labour to the extent of almost the whole £10,910,000 more than is used for the 10,000 houses. If only part of this excess expenditure were diverted to improving and reclaiming cultivable land, improving farm equipment, or agricultural research, it could produce lasting national assets, bring permanent increases in our food supply, and add to the prosperity of the farming community.

The Area of Land in Question

While reiterating their recognition of the importance of not wasting good farm land, the Executive consider that the threat to agricultural land from housing, new towns and town extensions has been grossly exaggerated. They believe that (unless the population much increases) the dispersal from congested places in Great Britain necessary to permit of redevelopment on satisfactory standards, is very unlikely to exceed a further 5 million people. Housing these at an average of ten families an acre would only use 143,000 acres. If (which is very unlikely) all of them, and their dispersed industries, schools, shops, public buildings and open spaces, had to be provided for in entirely new town development over the next 20 years, they would occupy (at 14 persons an acre for all urban purposes) only a further 357,000 acres of various classes of land, not all of it agricultural. The area of agricultural land in Great Britain is about 45,000,000 acres (of which about 29,000,000 acres are arable and grass and about 16,000,000 acres are rough grazing), in addition to woods and forests.

It is, of course, important that in siting new housing or urban developments, care should be taken to avoid as far as practicable the use of land of high fertility and the severance of individual farms.

When the potential food production from home gardens and town allotments is taken into account it is impossible to regard a withdrawal of ½ per cent to 1 per cent of rural land to housing and town development as a serious menace to the home food supply. It is not sufficient to justify an attempt to coerce or persuade the British people to abandon standards and ideals of home living that are deeply implanted in the national character.

LIBRARY NOTES

Swiss Housing Estates

Julius Maurizio, Les Editions d'Architecture, Erlenbach-Zurich.

MR. MAURIZIO'S book is an account of the housing work of various authorities all over Switzerland during the decade from 1940 till 1950. The production is excellent, the considerable number of plans and drawings a welcome help and their readability an example for imitation to those editors who specialize in "postage-stamp" reproductions of drawings. The text is informative, readable and short: all assets.

In considering the subject the first impression is one of greater unison of design than has been apparent before; there are fewer local characteristics though here and there the use of different materials achieves welcome variety. On the whole, one cannot expect from a small country like Switzerland much architectural regionalism in its present housing work and while there are natural differences between north and south these would appear to be less outstanding than the common ties of a kindred architectural approach which can be distinguished everywhere.

In the actual planning of houses there exists considerable variety: all types are used detached, semi-detached and terrace and the standard of planning and detail design is normally very high. As regards floor areas these are now very similar to those used at present in this country and for that reason the study of these plans should be of particular interest. It is also a pleasant surprise to see that this well-cultivated planning ground still can yield new and improved solutions; Cramer, Joray and Paillard's terrace housing "Rainacker" at Rekingen is quite excellent and measures up to the highest standards. The carefully studied and detailed plans of these architects belong without doubt to the most intelligent solutions that have come forth and the architectural treatment keeps pace with the excellence of planning.

There are, too, several very interesting arrangements of flats and in the treatment of the difficult problem of kitchen and dining space useful suggestions have been made following a trend which appears to have originated in Sweden. Architecturally the low and medium high block of flats continues the theme of the typical terrace house and, therefore, the Swiss architect should find the problem of blending houses and flats in mixed development a relatively easy task.

On the other hand, the point block has made its entry and is successfully handled with efficient floor plans though the matter of orientation must remain an inherent difficulty in this type of building: a comparatively large number of relatively not well-orientated rooms cannot be avoided.

The most impressive feature of this housing work is the excellent site planning throughout with particular attention to natural features; in spite of this it has nearly always been possible to achieve an efficient and well-orientated layout without forcing an issue or a motive. This in a country that abounds in sloping sites is an achievement in itself.

As to the architectural expression the tendency has always been for quiet well-being and this may, perhaps, be a source of disappointment to those who associate strong contrast and dramatic accentuation with good architecture; they even expect it in domestic work and are wont to sidestep real achievements without noticing them. Superficially these Swiss dwellings are modest and simple, but their detailing is superb. Real appreciation of simple architecture depends upon a good and well-trained eye.

Altogether this record of Swiss housing work has come out at an opportune time for this country. Since space standards have, unfortunately, been reduced in England the study of the simple and economic Swiss housing schemes will be rewarding for the architect who has to grapple with similar problems.

WALTER SEGAL.

Modern Architectural Design

by Howard Robertson. Published by Architectural Press. Price 25s.

READERS who were receiving their architectural education in the 1930s will recall the first edition of Howard Robertson's "Modern Architectural Design" which quickly became a standard textbook on the subject of architectural expression. The book has now been out of print for many years and this new edition is therefore very welcome, particularly as the book has been considerably revised, reset and new illustrations have been used in place of the original ones. The book is a sequel to the author's "The Principles of Architectural Composition," and as he states in the preface, it is an attempt to deal with certain aspects of design from the standpoint of a practising architect of the present day. The form of the book has not changed a great deal from the original edition and it is interesting to note that the text is still as relevant to-day as it was when the book was first published. Mr. Robertson deals with the question of programme, organization, and plan, structure, materials for the exterior, expression, internal details, interior decoration, the house, and the modern movement in architectural education. The chapter on external details is of particular interest as it underlines the

necessity for more care in the detailing of contemporary buildings, pointing out very rightly that many modern buildings rely on their detail design for their ultimate success. The chapter on materials for the exterior deals with many of the traditional and contemporary materials in common use and offers suggestions for improved detailing and a more careful use of materials. The author appears to be particularly impressed by the work of Mies van der Rohe whose extremely careful and refined detail in relation to the proportions of his buildings contributed much to their success.

This new edition of the book is very thoroughly illustrated with photographs and drawings of practically all the well-known modern buildings both in this country and abroad and it is to be hoped that architectural students of the present generation will find this publication as useful as those of the 1930s. It is indeed a good omen that this new edition of Modern Architectural Design should be published at the beginning of the author's term of office as President of the R.I.B.A. and contemporary architects will particularly appreciate a President who has not only heard of Corbusier, Mies van der Rohe and Gropius, but also has a genuine appreciation of their work and their contribution to the architecture of the twentieth century. E. D. M.

Streamlined Specifications Standards, Volume 1—Architectural (In Three Pads)

By Ben John Small. Published by Reinhold Publishing Corporation, U.S.A. Price 20 dollars per pad.

IN 1939 the magazine *Progressive Architecture* published its first article entitled "Streamlined Specifications," by Horace W. Peaslee, and since that date has published similar examples, with the result that in America it has been felt that an entire book on the subject of Streamlined Specifications would be of value. This publication has now been achieved and the work consists of three pads, No. 1 covers Contractual items, Site work, structural items; No. 2 covers Masonry, Weather Protection and Metal work; and No. 3 covers Finishing. Streamlined Specifications Standards will ultimately consist of Three Volumes of Three Pads, the one under review being Volume 1—Architectural; Volume 2 will cover Mechanical and Electrical work and Volume 3 Equipment of Buildings. The publication is arranged in a practical fashion as a pad rather than a book with text double spaced and printed on one side of the page only with wide margin for notes and amendments. The pads have been designed so that individual pages can

be removed from the book for the insertion of typewritten corrections, or sections may be removed entirely for the purpose of rearrangement and filing. Each page is numbered on both sides and the 36 sections grouped into seven categories are divided into three pads mentioned earlier.

The text of the volume covers a tremendous field and on the basis of American practice gives Standard Specification Clauses for almost every possible condition and type of work.

While the text of the publication in a large measure is not applicable to work in this country, the principles of the publication appear to be so good as to warrant the production of an English version. The standard of specification writing has not improved in the past few years, and there appears to be a very strong case for the publication of a volume or series of volumes of this type, particularly as the method of production suggests that the selling price could be quite reasonable, especially if the format of the American pads was followed. It is to be hoped that an enterprising publisher will be encouraged to commission the production of an English version of Streamlined Specifications Standards and if this does happen one can foresee a very considerable sale for such a publication, which could rapidly become not only a best seller but an essential instrument to be used in every architect's office.

E. D. M.

Coventry: The Development Plan

Published by the Coventry City Council, 1952.

AFTER so many years of highly coloured publications of plans for this place and that area, the general public may be at first inclined to view with suspicion any further literature on the subject; but this plan for Coventry is distinctly different from what has gone before. The chief and really important difference is found in the explanatory paragraph on the title page: "This plan shows the way in which . . . areas will be developed." The italics are mine. No longer are we faced with suggestions of how areas *might be* developed. No longer are we confronted with Utopian essays. In this plan for Coventry we are told what the City Council intends to do.

Coventry, because of the growth of the motor car industry, expanded more rapidly in this century than any other large town in the country. It is still expanding, and over 13,600 applicants are on the housing waiting list. Add to this the recommendation of the West Midland Plan that: "Coventry should plan for approximately another 40,000 people as overspill from Birmingham and the Black Country," and some indication is given of a part of the problem. There are many others. In some areas the net den-

sity of existing housing is over 100 houses per acre. This has to be reduced to a net density of, at most, 100 rooms per acre. There is the problem of war damage and the re-siting of industry. There is the need to unravel the medieval network of streets and create a road pattern suitable for modern transport. All these problems are considered in this admirable publication.

This book not only shows the solution but, and this is the most difficult task, shows how it can be done. The analysis of the labour force available and the programme of how it is to be directed show very clearly how Coventry intends to proceed from paper planning to the reality of bricks and mortar. Donald Gibbon, the City Architect and Planning Officer, is to be congratulated on the plan he has prepared, and the Council of Coventry on their support of such an endeavour.

CECIL STEWART.

Austria

By Monk Gibbon. Batsford. Price 18s net.

THIS is a travel book but, as the author makes clear in his preface, to be read preferably before or after the event. It is not a guide book, but something far more rich, rare and reminiscent—and more rewarding to read.

Mr. Gibbon has "done" Austria almost in the cosh-boys' as well as the globe-trotters' sense. It would not be fair to call the result a muddle: it is, rather, the cosy confusion of a well-loved and lived-in room, where the *objets d'art* are mixed up with the history homework, the discarded ski-kit and the peasant souvenirs. It suggests the den of a lively, enquiring and well-furnished mind.

Mr. Gibbon is quite disarmingly talkative and partisan, but mercifully spares us the Austria of "White Horse Inn" (though it is mentioned, if you want it), "Autumn Crocus" and the rest: there is no Third Man to come between the author and the reader, horribly true as that character is of the immediate post-war period.

The author gallops us up hill, down tal and through my lady's baroque bed-chamber at a cracking pace, pausing only to toss scraps of history and philosophy over his shoulder, at the end leaving us (and our £40) quite exhausted. A coherent review is correspondingly difficult in a short space.

Mr. Gibbon's architectural animadversions (to seize with relief on one element in the "flavour") are useful and sound: for example, he does not underrate Admont and other "little" masterpieces too often overshadowed by Melk. Nor has he miscalculated the relative merits of Maria Saal and Gurk. Incidentally, readers may care to know that the book's absence of colour which Mr. Gibbon regrets in describing the latter's frescos is to be found in Walther Frodl's *Die Gotische*

Wandmalerei in Kärnten, where the curiously unmedieval pale, pastel tonality is adequately reproduced.

The smaller "barockisiert" churches are not neglected, though mostly in relation to the Tyrol. Mr. Gibbon possibly knows a small vernacular gem on the Wörthersee near (if memory serves) Krumpendorf, with almost "fairground" carved and gilt figures and a mechanical organ, but does not mention it. As a sample of the author's catholic tastes, he rightly castigates the inelegance of the "Arlberg crouch" in ski-ing in much the same terms as an offence against architectural taste or the treachery of Frederick of Prussia towards Maria Theresa, and one cannot but enjoy his impartial distribution of backhanded thwacks as well as palms.

Mr. Gibbon's love for Austria and the Austrians, and obviously theirs for him, occasionally betrays him into claiming almost too much for them. What might be construed as a gratuitous crack about occupying troops rather mars an early chapter—though for all one knows Mr. Gibbon may have been among them, where he certainly would have been an asset to international relations. They were on the whole (except for the black sheep to be found in any unit) as well behaved as can be expected of "release-happy" troops anxious to get home after the party was over. The "dignity and docility" with which the Austrians, according to Mr. Gibbon, ignored them was not always readily apparent and sometimes earned another name, though it was a period of nerviness and suspicion. Indeed, Mr. Gibbon and other travellers have to thank those troops who, through specialist officers, did what they could about first-aid repairs to monuments and art-treasures, sometimes without very much constructive help from the Austrians, for the fact that there is so much left to write about and visit.

As one who happened to be concerned, the reviewer is sorry to have to make this small point, but feels that somebody ought to. It does not lessen enjoyment of a most readable book, presented and illustrated with the attractiveness to be expected of Batsfords.

BASIL MARRIOTT.

A History of Civil Engineering

By Hans Straub. Published by Leonard Hill, Ltd. Price 25s.

THIS book has been written in a popular manner as an endeavour to provide an overall picture of the development of civil engineering. The publication is a translation from the German by E. Rockwell and the book covers the development of civil engineering from the early Egyptian and Babylonian roads and canal works and the Roman bridges, and other engineering structures up to the civil engineering of the 19th century, with a

final chapter dealing with the influence of engineering construction on modern architecture. The book is illustrated by a number of photographs. These include photographs of early modern architecture. One cannot altogether agree with the views of the author on the question of contemporary architecture, or what he refers to as "The Technical Style." His criticisms of the Berlin Turbine factory by Peter Behrens in particular show a lack of appreciation of the importance of this early contemporary building. In general this book should be useful not only to students and engineers in assisting them to view their own profession in relation to a broad historic background, but also to give the layman an insight into the world of engineering.

E. D. M.

Dynasty of Ironfounders

by Arthur Raistrick. Published by Longmans, Green and Co. Price 30s.

DR. RAISTRICK has made a comprehensive study of Coalbrookdale Iron Works which were founded by Abraham Darby in Bristol in 1699. This book is the result of his study, and traces the unbroken history of the company through two and a half centuries. The book is based upon manuscript material hitherto unpublished, and the result is an interesting survey of the foundation and development of an important industrial concern which in a sense becomes a history of the industrial revolution in this country. The founders of the Coalbrookdale Company were Quakers, and the letters published in the book show their interest and concern with social problems of the times, and their relationship with their employees as the company developed. Early information given in relation to costs and prices are of particular interest, and the illustrations in the book trace the development of much of the machines and plant used in iron foundry work. The illustrations include coloured reproductions of paintings by Cotman and John Piper. The appendices give details of early accounts of the firm and inventories of plant and materials which in themselves make fascinating reading. The book is extremely well produced and makes a record of development over a long period of considerable interest.

E. D. M.

Building Construction

Volume One by W. B. McKay. Longmans. Price 12s 6d.

THIS is the 3rd edition of this well-known standard work on traditional building construction designed for a general first year syllabus in schools of building and architecture and first published in 1938. In the new addition figs. 7 (Piers) and 12 (Lintels) have been redrawn; and certain details of figs. 58 (casement windows) and 61 (double hung sashed win-

dows) have been modified. Letters received in the office of this journal from builders' foremen and others who have queries on construction, the answers to which are nearly all in one or other of Mr. McKay's volumes, prompt the suggestion that public libraries who have not already got these books on their technical shelves would do well to acquire them.

Economical Domestic Heating

By Henry Gordon Goddard, M.A., F.R.I.B.A. Published by E. & F. N. Spon, Ltd., London, 1952. Price 21s.

THIS book successfully covers the worst blind spot in home design, and should be read by everyone interested in an economically warmed house. As the author points out in the introduction, this book is not intended to be exhaustive, and the subject is a wide one, however the most recent research has been correlated with contemporary practice and summarized with reference to capital and running costs; economy of fuel and finance is the keynote.

The book begins with a description of the physiological requirements for comfort and their attainment, and continues with a comprehensive survey of types of fuel, insulation and ventilation, the author makes it quite clear that money spent on insulation is a capital investment where heating is concerned.

The next chapters deal with various systems of domestic heating concluding with an account of the heat pump and solar heating, both of which are in their early stages in this country. It is written simply enough to be understood by the prospective house owner, with the help of many clear diagrams, but is comprehensive enough (with a bibliography of some sixty publications for more detailed information) to be of great value to the student and architect.

British Plastics Year Book 1953

"A Classified Guide to the Plastic Industry." 23rd Edition. Iliffe & Sons Limited. Price 30s (postage 1s 3d). 562 pages.

WHEN the British Plastics Year Book was first published in 1931 it was the first and only reference book to the products of the plastics industry. Throughout the years it has increased in scope and value, and it remains the only classified guide to the products of Britain's plastics industry.

The new edition is divided into nine sections, three of which are given to classified lists of manufacturers of plastics materials, products and equipment. A further section contains an invaluable list of proprietary names connected with plastics, defining the product and listing the manufacturers. Linked with the classified guides and proprietary names list is a directory of

manufacturers containing more than 3,500 important firms and their addresses; and in addition, the Who's Who section names all the prominent figures in the plastics industry.

Introduced for the first time is a list of new companies registered during the past year; details include title, address, date of registration, capital and directors.

Woodwork Tools and Their Use

By Walter Coventon. Hutchinson's Scientific & Technical Publications. 42s. 304 pp.

THE author claims that his book explains what woodwork tools and appliances are for, their relative values, how to choose them, how to make them work, how to keep them in order and how to use them. This excellent book does just that. It is written in clear, straightforward language and well illustrated with line drawings and photographs. It is mercifully free of pictures of objects no one in his senses would wish to make. The chances are we may all of us have to set to and make things and I cannot imagine anyone not profiting from the wisdom and advice of Mr. Coventon. His words should certainly be read before tools are chosen and bought, they will give confidence to amateurs and valuable advice to professional woodworkers.

BOOKS RECEIVED

- Austria*, by Monk Gibbon. Published by B. T. Batsford, Ltd. Price 18s.
- Architectural Detailing*, by C. Hornbostel and E. A. Bennet. Published by Messrs. Chapman & Hall. Price 96s.
- 1952 Annual Convention of the British Wood Preserving Ass.* Issued by the British Wood Preserving Ass.
- Building Sanitation*, by L. B. Escritt. Published by Messrs. MacDonald & Evans, Ltd. Price 25s.
- Building Construction, Vol. 1, 3rd Edn.*, by Prof. W. B. McKay. Published by Messrs. Longmans, Green & Co. Price 12s 6d.
- Dynasty of Ironfounders. The Darbys and Coalbrookdale*, by Arthur Raistrick. Published by Longmans, Green & Co. Price 30s.
- English Architecture Since the Regency. An Interpretation* by H. S. Goodhart-Rendel. Published by Constable. Price 25s.
- History of Civil Engineering*, by Hans Straub. Published by Leonard Hill, Ltd. Price 25s.
- High Industrial Production with Electricity*. Published by The British Electrical Development Ass. Price 9s.
- Housing in Denmark*, by Esbjorn Hiort. Published by The Architectural Press. Price 21s.
- Norwich and the Broads*, by J. Wentworth Day. Published by Batsford, Ltd. Price 15s.
- New Design in Exhibitions*, by Richard P. Lohse. Published by Verlag fur Architektur.
- Specifications Standards*, by Ben John Small, A.I.A. Published by Reinhold.
- Town Design*, by Frederick Gibberd. Published by Architectural Press. Price £3 13s 6d.

Bituminous Felt

THE range of types of bituminous roofing felts seems to be ever increasing and is rapidly nearing the number of varieties advertised by a well-known tinned food manufacturer. It is becoming difficult for most of us to keep up with the developments and more particularly to know exactly where each type should be used as each is manufactured to meet the requirements of particular applications.

There has recently been published a new and extended edition of B.S.747 which attempts to classify the wide range of bitumen materials used primarily for roofing purposes. Many references to the types to be used for particular positions are given in various of the Codes of Practice, and CP.144.101 is devoted entirely to the subject of bitumen felt roof coverings and their proper installation. B.S.743 deals with types of bitumen felt specially suitable for use as damp courses.

The most important change in the new edition of B.S.747 is the inclusion of the asbestos-based types of felt which assist in the reduction of any fire risk associated with the use of other types of felt.

The B.S. now covers four basic classes of roofing felts which with their sub-divisions, covering differences such as types of finish, make a total of fourteen varieties. Incidentally, the reinforcement mentioned in the fibre felt type is a light weight of jute hessian and not chicken wire as one architect of my acquaintance expected. The number of names used in the building industry to describe the many types of bituminous felt seem to be very numerous and diverse and it would be helpful to those who specify, buy and inspect if the felt manufacturers would confine themselves to the B.S. descriptions to eliminate misunderstandings.

I have met many people in the building industry who look on felt roofing as a material essentially for use on temporary or semi-temporary buildings, but I think long experience has already shown this to be a wrong outlook as if the materials are properly selected and correctly applied they appear to have a very long life. Personally, and I emphasize that this is only a personal view, unless the roof coverings are liable to be subjected to traffic, I prefer bitumen felt to asphalt for flat roofs and I believe them to be less troublesome from the aspect of maintenance; even where there is traffic, bitumen felt covered with a thick screed, tiles or macadam has proved to be a very efficient roof covering for very long periods.

I notice that the roofing code draws attention to the desirability of using white reflecting surface finishes to aid thermal insulation. From experience, these whitened surfaces make a good deal of difference to comfort in the

rooms below during sunny weather. The most economic type of finish I have found is white chippings, which remain effective so much longer than whitewash or paint. Incidentally, great care must be taken to select only those paint materials which do not have deleterious influences on the bitumen content of the felt and its surface dressing. I saw one example of serious damage from this cause, and this has led me to require any paint or similar finish to be included in the roofing contractor's work so that he is held responsible for any breakdown of the bitumen.

I have, from time to time, found builders carrying out the laying of bitumen felt roofing themselves but, personally, I believe the specialized technique, knowledge and experience necessary to make a good job lie only in the hands of the reputable specialist felt roofing contractors and it is therefore wiser to use them alone; this is specially important for larger buildings where fixing of insulation and hot bonding of the layers of felt are required.

I notice care has been taken to ensure that the type references used in B.S.743 and in B.S.747 do not overlap, and thus all those types intended for d.p.c. purposes have a prefix "5," while those for roofing have the prefixes "1" to "4" according to their class. Although these B.S. primarily classify the products, they also give an indication of the uses for which each type is intended, standardize weights and standardize quantities in packages. It would be helpful if all manufacturers would put the B.S. type reference on their packages as it would simplify inspection on site. While B.S.747 is called a classification, it includes quite a lot of information on the materials for the bases, saturants, coatings and surfacings. It seems that so far tests for the quality of roofing felts have not been devised, but the new edition on the B.S. is likely to be of considerable assistance to architects in keeping them on the right lines when writing specifications or comparing estimates.

CP.144.101 is certainly one of the most easy of the code publications to follow and seems to me to be more positive and clear in its statements than many of the others. The illustrations are clear and sufficient to take care of the general methods of dealing with the details of normal roofing. Some readers of the code may feel it sets an exceptionally high standard, but personally I do not think this to be true as this form of roofing, when used for permanent buildings, needs to be of good-quality materials and workmanship. I have heard adverse comment on Table 2 in Clause 305 but I do not think it unreasonable to call for three layers of felt on flat roofs exposed to normal weather conditions.

Fire risk is a subject often raised in relation to the use of bitumen felt for roofing. Clause 308 of the Code is certainly helpful guidance on the subject.

There is a point on which I have sometimes had fears, namely the use of felt on timber flat roofs which are fairly effectively sealed on the underside so that little or no ventilation reaches the joists and boarding thus producing ideal conditions for decay to start. Special mention of this matter is made in Clause 303, but I wonder whether it would not have been wise to have recommended a preservative treatment to obviate the risk. I am pleased to see the recommendation that tongued-and-grooved timber boarding is preferable and that even this should be nailed at every joist. Incidentally, no mention is made of whether boards should be heart side upwards or downwards. I believe it helps to be sure that any curling of boards does not form ridges.

I certainly think stress should have been laid on the need to treat with preservative the timber fillets bedded in concrete, as are necessary at verges (see Fig. 5 of the CP.144.101). I am aware they may get coated with bitumen but this is of little value if the back of the fillet disintegrates. I think the statement that the screeded bed of concrete and similar substructures "should be suitable for application of the felt roofing" might, with advantage, have been amplified to tell those finishing screeds more precisely the type of surface finish really needed for the purpose.

Many in the building industry have argued with me that bitumen felt is useless as a damp-proof course. At one time I held somewhat similar views but I am now of the opinion that this material, if properly selected and laid, is as good or better than quite a number of other materials which have been traditional. Felt will take up minor movements and settlements in walling and is also quick and easy to lay, thus economizing in site labour. I have often heard it said that in a few years the felt base will disappear, but I do not think that it matters if it does disintegrate as the bitumen remains and it is this part of the combined material which, in fact, acts as the protection against damp. On the other hand, for d.p.c.s at or over openings such as windows and doors where a part of the d.p.c. may be vertical or on a slope, the bitumen might move if the felt disappears and consequently I would be less inclined to use it in such positions if alternative materials are available without undue additional cost. In this connection Appendix C of B.S.743 on selection and laying of d.p.c. materials is very useful guidance but it might have been amplified to cover a specific recommendation as to the type of felt

Continued on page 441

3/4" ASPHALTE (TWO COAT WORK) & FELT ON SCREED
LAID TO FALL

PRECAST CONCRETE FLOOR POTS

STEEL TENON FIXING FOR TRUSSED BEAM

1/2" 'CELOTEX' BOARD COVERED
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WIRE MESH MATTRESS

METAL WINDOWS

PRESSED METAL CILL

CEDAR SHINGLES ON
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2" BLOCK WALLING

COPPER FLASHING ON
BUILDING PAPER TO
ALL EAVES UNITS

1 1/2" TILTING BATTEN

PRECAST CONCRETE
EAVES UNIT, TYPE 'B'

MASTIC

TRUSSED BEAM

VENETIAN BLIND IN
RECESSED BOX

'TENTEST' CEILING
BOARD

FACE OF COLUMN

METAL ANGLE COVER
FILLET

PRESSED METAL CILL

4 1/2" FAIRFACE
BRICK PARTITION

'LEADKORE' D.P.C.
LAPPED OVER
COPPER FLASHING

PRECAST CONCRETE
FLOOR POTS

2" x 1 1/2" COPPER KEYS WEDGED
INTO VERTICAL JOINTS

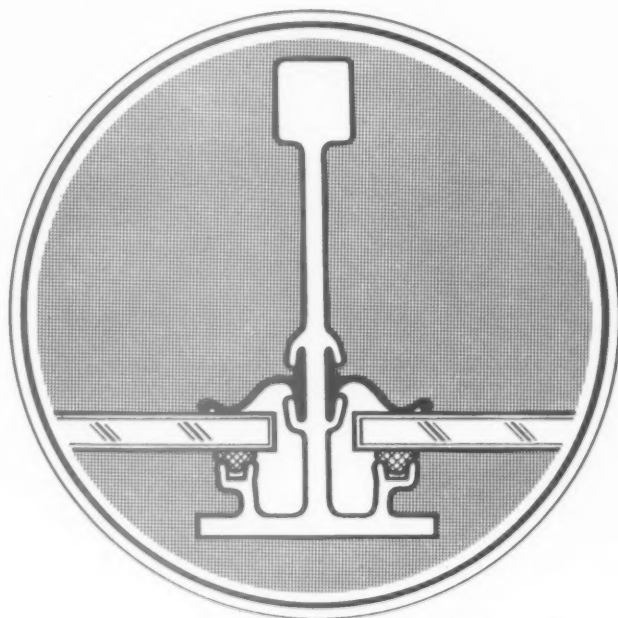
'TENTEST' CEILING BOARD

1/4 F.S. SECTION



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THE **WARDLE** ENGINEERING COMPANY LIMITED, OLD TRAFFORD, MANCHESTER 16

Continued from page 440

best suited for application to timber frames built into brickwork. The shortened form of CP.144.101 forming the appendix to B.S.747 is an excellent summary giving the essential information for rapid reference.

DUTCH UNCLE

LEGAL NOTE

Dangerous Premises: Some Practical Problems

ONE of the problems confronting owners of property which have fallen into such a state of disrepair as to be dangerous, is as to the means of obtaining possession of the property for the purpose of demolishing it and rebuilding on the site.

Usually properties of this character are let to weekly tenants, and are controlled by the Rent Acts. But the Rent Acts do not make any provision enabling owners to obtain possession in such circumstances.

The only means available to the owner in such cases of obtaining possession are to be found in s. 156 of the Housing Act, 1936, and in s. 67 of the London Building Amendment Act, 1939.

Under the Housing Act a local authority may make a closing order in respect of a part of a building which is unfit, and it may make a demolition order.

Generally, a closing order will not be of much assistance to the owner, since thereby he will be able to obtain possession of only a portion of the building, i.e., that portion in respect of which the closing order has been made. In such a case accordingly repair can only be in the nature of a patchwork job, and cannot get down to the real root of the trouble, the solution for which can only be found by complete demolition and rebuilding.

Where either a closing order or a demolition order is made under the Housing Act, 1936, the protection of the Rent Acts will be excluded from the part in question of the premises in the one case, and from the whole of the premises in the other, and possession of the part or the whole as the case might be can be obtained from the County Court or from the justices. Summary Proceedings for the recovery of possession under the Small Tenements Recovery Act is not recommended, because of the technicalities of those Acts, and many instances have occurred in which proceedings before justices have, for lack of observance of some procedural technicality, proved abortive.

However, the all-important thing is to persuade the authority to make the necessary demolition order or closing order. But local authorities are reluctant to make such orders, because of the added obligation thereby imposed on them of finding housing accommodation for additional persons,

who thereupon help to swell their already swollen lists of homeless people.

It is important to observe that if the withdrawal of protection of the Rent Acts from the property is desired, the order must be made under the Housing Act, 1936, since, strange to say, this happens to be the only Act, apart from the exception referred to below, which contains specific provisions on the point.

Thus, an order made under the Public Health Act, 1936, or the Public Health (London) Act, 1936, will be of no avail, and the tenant will be protected. This point has recently been forcibly illustrated by the decision of the Court of Appeal in *Marela, Ltd., v. Machorowski*. In that case a closing order had been made by justices under the powers given by the Fifth Schedule of the Public Health (London) Act, 1936, on the ground that the premises were unfit for habitation. The landlord thereupon gave the tenants notice to quit and subsequently brought proceedings for possession in the County Court. It was held, however, that the tenants still enjoyed the protection of the Rent Acts, and that, as the landlords could not prove any ground for obtaining possession under the Rent Acts, no order for possession could be made.

But to turn now to a consideration of a further point and that is as to the position when a Dangerous Structure Notice is served under the London Building Acts. In such a case again the only practical method of dealing with the structure may be to pull it down completely.

The owner in such a case, if he should be unsuccessful in obtaining a demolition order from the local authority, so as to place himself in a position to obtain possession of the property, may operate s. 67 of the London Building (Amendment) Act, 1939.

Under that section if a certificate can be obtained from the District Surveyor that the property is a danger to the inmates, the justices may on application of the L.C.C. make an order directing the inmates to vacate the building. Although the Act appears to be silent as to the operation of the Rent Acts in such a case, it would appear that the principle of *Marela, Ltd., v. Machorowski* would not apply, and that the justices would be bound to make an order for vacating of the property.

The interesting question, however, would arise in such a case whether the evicted tenants would have any right to re-enter into possession into any new premises which may be erected subsequently. It would seem, however, that if their tenancies were determined by notice before any new building was put up, all rights under the Rent Acts would be lost. This would appear to be in accordance with the decisions that have been given with regard to demolished war damaged properties.

Franeke Huntington Bosworth Memorial Fellowship in Landscape Architecture

The Department of Landscape Architecture in the College of Architecture at Cornell University offers a Fellowship of One Thousand Dollars for the academic year 1953-54.

Candidates must be graduates of an accredited school of Architecture or Landscape Architecture.

The academic programme will stress the relationship of Landscape Architecture to Architecture and City Planning.

The degree Master of Landscape Architecture will be granted upon satisfactory completion of the required work.

Further enquiries should be directed to Dean Thomas W. Mackesey, College of Architecture, Cornell University, Ithaca, New York.

Applications will be received until June 1, 1953.

The Royal Sanitary Institute Prize Essay Competitions for 1953

Two prizes are offered by The Royal Sanitary Institute this year as follows:

The John Edward Worth Prize of £60 for an essay on Internal Planning Layout and Equipment of Dwellings to Reduce Domestic Work Without Loss of Efficiency and Within Reasonable Expenditure.

The John S. Owens Prize of £15 for an essay on The Location of Industry Having Regard to the Health of the People.

Intending competitors should apply to the Secretary, The Royal Sanitary Institute, 90, Buckingham Palace Road, London, S.W.1, for a copy of the conditions. Entries must be received by December 31, 1953.

L.C.C. Educational Building Programme, 1954-55

The Education Committee of the L.C.C. have submitted for the approval of the Minister of Education primary and secondary school projects for the main 1954-55 building programme totalling £4,591,000. Six comprehensive secondary schools are included—two in Camberwell and one each in Lewisham, Kensington, Shoreditch and Woolwich—and county complements to Emanuel School, Wandsworth, and Lady Margaret School, Fulham. Six primary schools and two voluntary secondary schools are also in the programme. For the reserve list, projects have been put forward totalling £2,656,810. These comprise five other comprehensive secondary school proposals, two primary schools and three voluntary secondary schools.

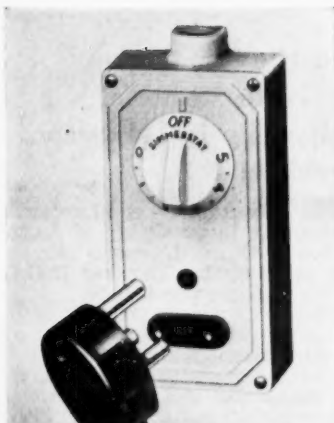
MOSAICS

SERVICES ELECTRIC WIRING ETC. B 5/19.

An economical heat control for use with fixed or portable appliances such as hot plates, percolators, electric irons etc. This new Simmerstat from J. H. Tucker & Co. Ltd., Kings Road, Tyseley, Birmingham, 11, is available in two ranges. One range is suitable for use with any 15 amp. 3-pin plug (B.S.546). The other range is designed for use with 13 amp. rectangular pin plugs (B.S.1363). Surface and flush models are available in each range. The surface model can be supplied either in a cast iron case finished in cream enamel or in a black enamelled cast iron box with aluminium alloy plate finished B.M.A. Prices of the various models range from 54s. 8d. to 65s. 8d.

Porcelain and Mica insulation is used and all non-current carrying metal parts are automatically earthed to the box by the fixing screws.

The Simmerstat (a registered trade name of Sunvic Controls Ltd.) enables an electric switch to be operated with much the same flexibility of control as is normally associated with gas-taps.

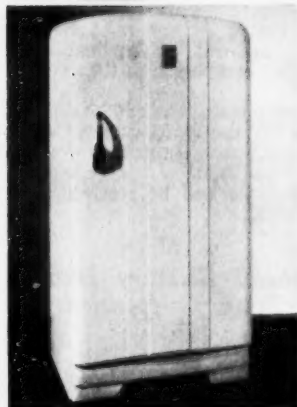


FITTINGS REFRIGERATORS C 1/5

The three illustrations C 1/5 to C 1/7 show two new refrigerators by the General Electric Company Ltd., Magnet House, Kingsway, London. The exterior design for both refrigerators is the same as shown in C 1/5. Both are of 7 cu. ft. capacity. One, the D.M.J. 71 is a de luxe model; the other, the D.M.M. 71 embodies all essential features at minimum price.

The floor space occupied by both models is the same as that of the G.E.C. 5.3 cu ft model but the height of the D.M. models is 2in greater.

Both refrigerators are insulated with glass fibre to an average thickness of 3in. The standard voltage is 200/250 but motors wound for any voltage and frequency can be supplied at extra cost.

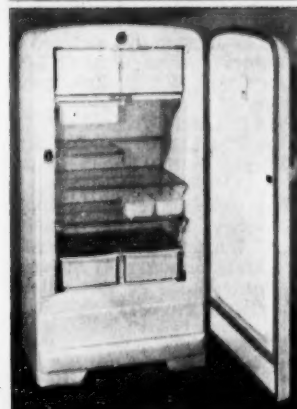


C 1/6

The interior of the de luxe model D.M.J. 71 which is the first British-made domestic refrigerator to incorporate a full width freezer. This model will cater for the increasing number of households who rely to a great extent on frozen foods.

This model has thermostatic control at shoulder level a stainless steel freezer incorporating a shelf for quick ice-making, a deep plastic meat or fish chiller and two exceptionally deep saladors.

The shelf area of this model is 13.4 sq ft. The price is £147 7s. 7d.



C 1/7

The interior of the D.M.M. 71 contains many features identical with D.M.J. 71. The freezer is smaller and there is only one salador. In other respects the difference is only a matter of economy. Both models have automatic internal lighting. The shelf area of the D.M.M. 71 is 12.5 sq ft and the cost is £137 10s. 0d.



INDUSTRIAL NOTES

● Britain's prefabricated building industry will use the 1953 Coronation British Industries Fair, April 27 to May 8, to launch a drive to beat last year's export record of nearly seven millions sterling.

The industry's export earnings have multiplied by twelve in four years, but this will be the first time it has enlisted the promotional aid of a trade fair with its attendant campaigns of world-wide advance publicity.

Twenty of the leading manufacturers will have exhibits in a 40,000 sq ft "Transportable Town" on the first floor of Earls Court. Included will be a number of fully furnished houses constructed on entirely new principles which make for speedier building and lower costs. Complete structures and components will also be seen which firms are using in export buildings that range from huts for native chiefs to hangars for giant aircraft.

● Three cash awards for successes in architecture and surveying examinations, and two for successes in examinations on building, were made in 1952 to employees of the Dunlop Rubber Co. The awards were given under the company's education scheme. A record total of 183 awards, worth £1,715 6s, was made during the year for successes in a wide range of examination subjects.

● Jenolite, Ltd., are now producing a greatly improved, much more powerful version of their successful alkaline paint stripper and degreaser (PS5).

Like its predecessor, the new stripper is supplied in powder form. For standard purposes it is mixed in the ratio of one pound to one gallon of water heated to 95 deg C, and is used in a mild steel tank.

● Mr. T. Sheridan Innes, after 14 years with Duresco Products, Ltd., paint manufacturers, has returned to his former profession as a business consultant. He acts as consultant to Duresco advertising through their agents, C. J. Lytle, Ltd.

We are informed that Mr. Innes and his associates, trading as Sheridan Innes, Ltd., 148, Strand, W.C.2, are available to provide services concerned with public relations, market research, design of products and packages, etc., and sales promotion. He is taking an active part in promoting the use of roller-painters, and has qualified demonstrators and lecturers freely available by arrangement to meet architects, contractors and industrial users.

● "Tests on Road Bridges," National Building Studies Research Paper No. 16, has been published by H.M.S.O. for D.S.I.R. price 3s. (75 cents U.S.A.), by post 3s 1½d.

● Celotex, Ltd., the insulation and hard-board manufacturers, announce the election of two new directors of the company. They are Mr. A. Dawson, A.C.A., the company secretary, and Mr. P. W. Porter, A.M.Inst.B.E., works manager.

● Mr. M. W. Thring, M.A. (Cantab.), F.Inst.F., F.Inst.P., has been appointed an Assistant Director of Research of the British Iron and Steel Research Association. He will continue as head of B.I.S.R.A.'s physics department.

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

CONTRACT • NEWS •

OPEN BUILDING

ALDERSHOT B.C. (a) 1 pair of houses, Gloucester Road. (b) Borough Engineer, Town Hall. (c) 2gns. (e) April 27.

BOOTLE B.C. (a) Aged persons' hostel at rear of 47, Balliol Road. (b) Borough Surveyor, Town Hall. (c) 2gns. (e) May 4.

BOURNEMOUTH B.C. (a) (1) Contract W.H.10 (2nd), 5 pairs of bungalows; (2) Contract W.H.4, 2 pairs; (3) Contract W.H.2(A), 1 pair; (4) Contract W.H.2(B), 1 pair; (5) Contract W.H.18 (1), (2), (3) and (4) combined, on the West Howe Estate; (6) Contract L.A.8 (3rd), 4 pairs of bungalows on the Leybourne Estate; (7) Contract C.3, 1 block of 3 houses on the Kinson Estate. (b) Borough Architect (Room 106), Town Hall. (c) 2gns each contract. (e) April 21.

CARDIGANSHIRE C.C. (a) Police station at (1) Devil's Bridge and (2) Llanarth. (b) County Architect, County Hall, Aberystwyth. (c) April 27.

CHELMSFORD B.C. (a) (Contract No. 1) 6 shops and 26 flats in 3 blocks with ancillary works, Chignal Estate; (Contract No. 2) refreshment pavilion in the Central Park; and (Contract No. 3) 2 blocks of dressing accommodation, etc., at the Swimming Bath, Waterloo Lane. (b) Borough Engineer, Municipal Offices, Duke Street, stating contract or contracts. (c) 2gns each contract. (e) April 22.

CUMBERLAND C.C. (a) Erection and finishing of 1 timber classroom at Aspatria Council School. (b) County Architect, 15, Portland Square, Carlisle. (c) April 24.

DAGENHAM B.C. (a) 30 houses and 36 3-storey flats, Manor Road Estate. (b) Borough Engineer, Civic Centre. (c) 2gns. (e) April 27.

DERBYSHIRE C.C. (a) House and farm buildings at Derby Road, Risley. (b) County Architect, County Offices, St. Mary's Gate, Derby. (c) 2gns crossed cheque payable to Council.

DERBYSHIRE C.C. (a) Ambulance stations at Ripley and Mickleover. (b) County Architect, County Offices, St. Mary's Gate, Derby. (2) 2gns each site, crossed cheque payable to Council.

DEVIZES R.C. (a) 18 houses and site works at Bromham. (b) Messrs. Edwards and Webster, 10, St. Mary Street, Chippenham. (c) £1. (e) April 20.

DUKINFIELD B.C. (a) 30 aged persons' dwellings and 1 pair of houses at Lodge Lane. (b) Town Clerk, Town Hall. (c) 3gns. (d) April 16. (e) April 27.

FARNHAM U.C. (a) 42 houses, Weydon Lane (East) site. (b) Messrs. Gilbert and Hobson, Lloyds Bank Chambers, 75, Castle Street. (c) £2. (e) April 27.

***FILEY U.C.** (a) 2 blocks of 4 flats and 1 block of 2 shops with 4 flats over. (b) F. Vaux, 31, Quay Road, Bridlington. (c) 2gns, cheques payable to Council. (e) April 27. See page 28.

address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

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GRAVESEND B.C. (a) 6 garages in concrete block construction between Taunton Vale and Truro Road, Parrock Farm Estate. (b) Borough Engineer, 6, Woodville Terrace. (c) £2. (d) April 10. (e) April 17.

HAMBLEDON R.C. (a) 18 houses, Hartsgrove site, Chiddingfold. (b) Engineer and Surveyor, Council Offices, Bury Fields, Guildford. (c) 3gns. (e) April 22.

LONDON—CHINGFORD B.C. (a) Caretaker's house and store, Old Church Road Estate, E.4. (b) Borough Engineer, "Holmleigh," Ridgeway Road, E.4. (c) 1gn. (e) April 17.

LONDON—WEST HAM B.C. (a) (Contract 182) 27 flats, 6 houses and 2 garages at Barking and Bushey Roads, E.13. (b) Borough Architect, 70, West Ham Lane, E.15. (c) 2gns. (d) April 17.

MALDON B.C. (a) 38 houses in terraces on the St. Peter's Avenue site. (b) Borough Engineer, Municipal Offices. (c) 2gns. (e) April 20.

MANSFIELD (NOTTS). (a) 2 additional classrooms, cloakrooms, etc., at St. Philip's R.C. Primary School, Westfield Lane. (b) Rev. Father F. McNicholas, The Presbytery, St. Philip's R.C. Church, Chesterfield Road, Mansfield.

NEWARK B.C. (a) 16 houses in pairs at Hawton Road Estate. (b) Borough Surveyor, Municipal Offices. (c) 2gns. (e) April 20.

NEWBURY R.C. (a) 6 aged persons' dwellings at Southend, Cold Ash, Newbury. (b) Messrs. Floyd, Robson and Paul, St. Nicholas House, West Mills. (c) 2gns. (e) May 6.

N. IRELAND—NEWRY NO. 1 R.C. (a) 8 houses, John Street, Rathfriland. (b) W. H. McEvoy, 73, May Street, Belfast. (c) 3gns. (e) April 22.

NORTON R.C. (a) 4 houses at Langton. (b) Council's Architect, Council Offices, Welham Road, Norton, Malton. (c) 1gn. (e) May 4.

PLYMOUTH C.C. (a) 28 flats in Beaumont Terrace, Seven Trees. (b) City Architect, Seymour Road. (c) 3gns, payable to Corporation. (d) April 11.

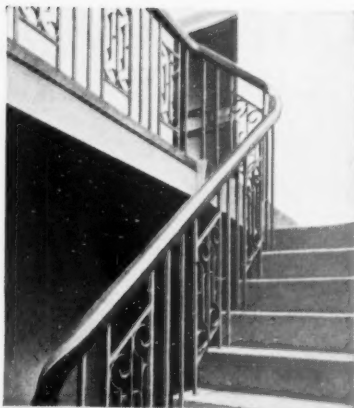
ST. NEOTS R.C. (a) 22 houses at Little Paxton, Hunts. (b) Council's Clerk, Council Offices, 32a, New Street. (d) April 13.

SCOTLAND—EDINBURGH C.C. (a) Civil Defence building. (b) City Architect, City Chambers. (e) April 18.

SCOTLAND—EDINBURGH C.C. (a) 40 houses at Restalrig Avenue and Fillyside Gardens (separate trades). (b) City Architect, City Chambers. (e) April 17.

SHERINGHAM R.C. (a) 10 dwellings at Bodham and 12 at Gimingham. (b) Council's Architect, Council Offices, St. Peter's Road. (c) 2gns. (e) April 23.

TONBRIDGE U.C. (a) 32 pairs of houses (Contract No. 1) and 13 blocks of 4 houses (Contract No. 2) Higham Wood Estate. (b) Engineer and Surveyor, Tonbridge Castle, Kent. (c) 3gns each contract. (e) April 21.



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TRURO C.C. (a) Shop, flat and house on Malpas Road Estate. (b) City Engineer, Municipal Buildings. (c) 2gns crossed cheque. (e) April 23.

TYLDESLEY U.C. (a) 38 houses, Shakerley Estate. (b) Engineer and Surveyor, Town Hall. (c) 2gns. (e) April 27.

WALSALL B.C. (a) Single-storey branch library at Coalpool. (b) C. C. Gray, 15, Bridge Street. (c) 2gns. (e) May 1.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. y denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

BUILDING

WYCOMBE R.D.C. (1) 164 houses. (2) Princes Risborough. (3) Geo. Wimpey and Co., Ltd., Hammersmith Grove, W.6. (4) £253,324.

MIDDLETON B.C. (1) 140 houses and 24 old peoples' flats. (2) Hollin Estate. (3) D. Franklyn, 2, Midland Bank Chambers, Station Road, Urmston. (4) £200,193.

HARLOW DEVELOPMENT CORPORATION. (1) 192 dwellings. (3) Rush and Tompkins, Ltd., 109, Station Road, Sidcup, Kent. (4) £309,480. (1) 273 dwellings. (3) Geo. Wimpey and Co., Ltd., Hammersmith Grove, W.6. (4) £423,246.

EALING B.C. (1) 64 flats. (2) Broughton Road. (3) Norman Sinclair, Ltd., 80, Uxbridge Road, London, W.13. (4) £127,903.

NEWCASTLE-ON-TYNE E.C. (1) Erection of Rutherford College of Technology. (2) Northumberland Road. (3) Stephen Easten, Ltd., Westgate Hill, Grange, Newcastle-on-Tyne. (4) £127,976.

BEDFORD CORPORATION. (1) Flats. (2) Ashburnham Road. (3) F. G. Minter, Ltd., 4, Buckingham Gate, London, S.W.1. (4) £119,455.

DEAL B.C. (1) 118 houses. (2) Balfour Road. (3) Perryman (Building Contractors), Ltd., 7, Castle Street, Tonbridge. (4) £162,871.

ST. PANCRAS B.C. (1) 46 flats, shops, basement car park. (2) Judd Street. (3) Gee, Walker and Slater, Ltd., 100, Park Lane, London, W.1. (4) £147,704.

EBBW VALE U.D.C. (1) 166 houses. (2) Hilltop extension. (3) Horn Construction Co., Ltd., Finsbury Pavement House, London, E.C.2. (4) £272,169.

NEWCASTLE-ON-TYNE CORPORATION. (1) Grammar school. (2) Rutherford site. (3) Harry Kindred (Newcastle), Ltd., 371, West Road, Newcastle. (4) £214,843.

READING CORPORATION. (1) Stoneham (Mid-West) secondary school. (2) Cockney Hill, Tilehurst. (3) Boyd and Murley, Ltd., 87, London Street, Reading. (4) £187,150.



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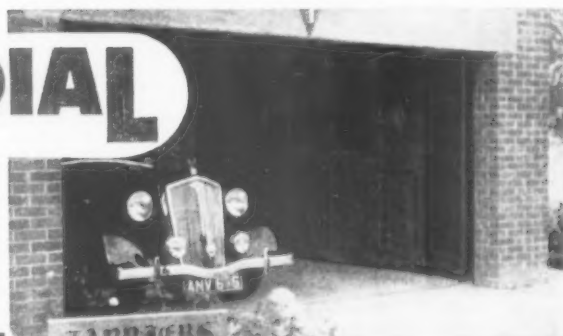
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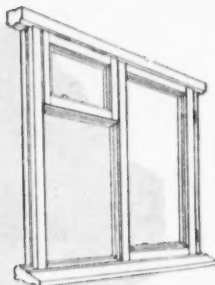
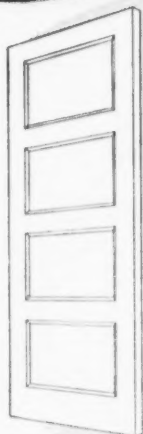
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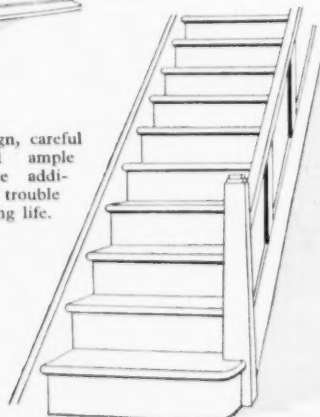
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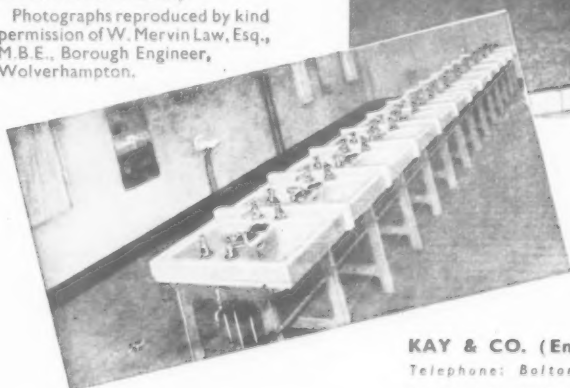
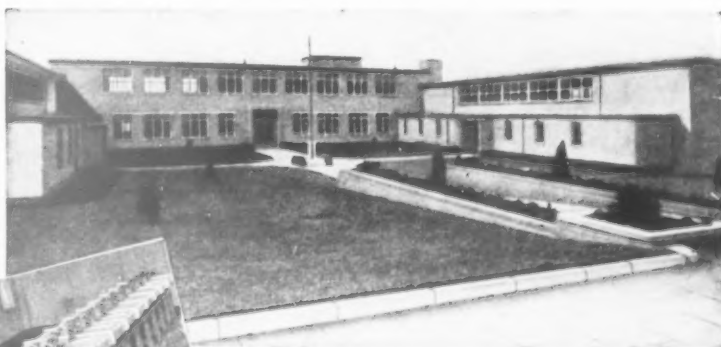
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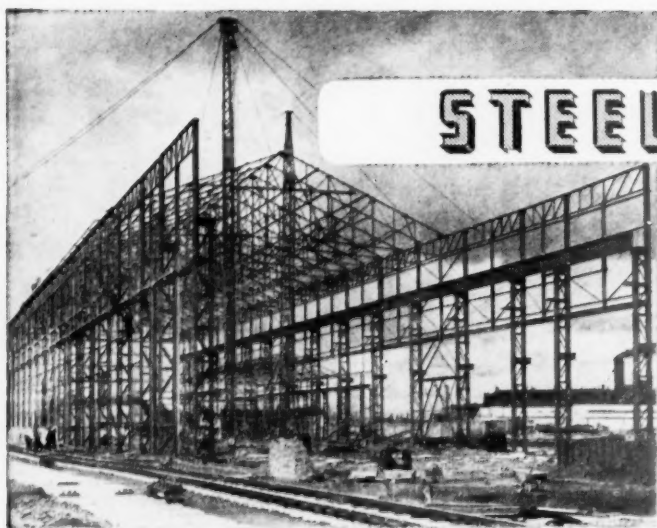
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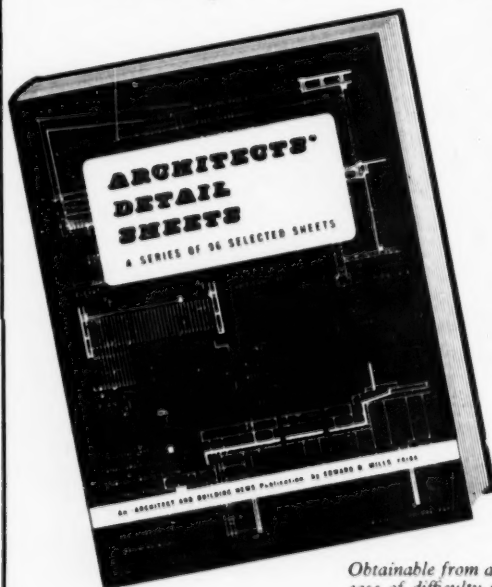


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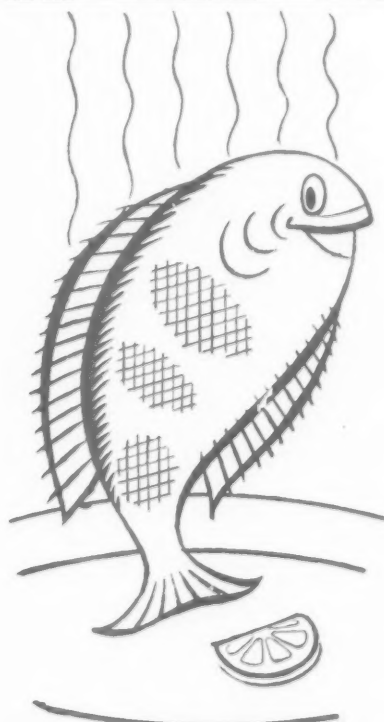
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[7020]

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[7022]

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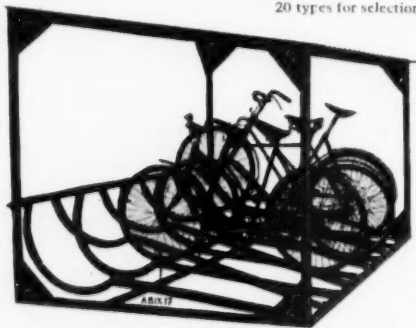
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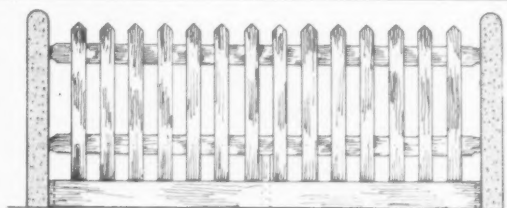
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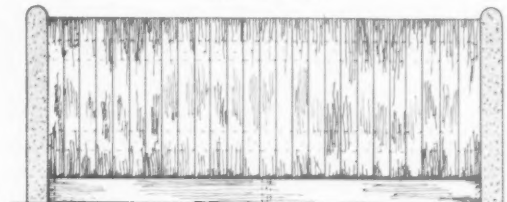
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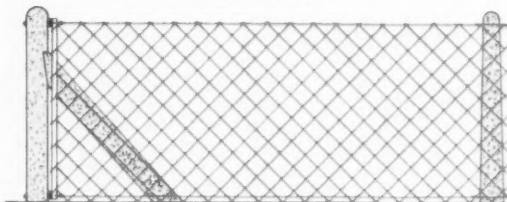
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